

# Beverage Management Student Guide

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# **Beverage Management**

## **First Edition**

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## **Student Edition**

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✓ **Note:** *The Student Guide Pages are found in the front of the Student Edition, and the Student Worksheets are found perforated in the back of the Student Edition.*

**KEY:** SW = Student Worksheet page      A.S. = Assignment Sheet  
           J.S. = Job Sheet                            S.S. = Student Supplement

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\* Student Worksheets are located in the back of the Student Edition.



**Objective Sheet****Unit Objective**

After completing this unit, the student should be able to describe the basics of beverage management. The student should demonstrate these competencies by completing the assignment sheets and job sheets, and scoring a minimum of 85 percent on the written test.

**Specific Objectives**

After completing this unit, the student should be able to:

1. Match terms related to beverage basics with their correct definitions.
2. Complete statements regarding the relationship between food and alcoholic beverages.
3. Select true statements regarding milk.
4. Complete statements regarding soft drinks.
5. Match characteristics of hot and iced tea.
6. Select true statements regarding characteristics of water.
7. Complete statements regarding characteristics of fruit and vegetable juices.
8. Select true statements regarding coffee.
9. Match espresso terminology with their descriptions.
10. Complete statements regarding hot cocoa and hot chocolate.
11. Match the beer fermentation steps and ingredients with their descriptions.
12. Match types of beers with their characteristics.
13. Match types of other fermented beverages (besides beer) with their descriptions.
14. Complete statements regarding steps in the distillation process.
15. Match distilled alcohol characteristics with their descriptions.
16. Select true statements regarding packaging of alcoholic beverages.
17. Complete statements regarding de-alcoholized beverages.

## Objective Sheet

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18. Identify beverage glassware.
19. Identify beverage stemmed glassware.
20. Identify bar tools.
21. Select true statements regarding drink machines.
22. Match commonly used edible supplies with their grouping.
23. Complete statements regarding beverage area opening procedures.
24. Complete statements regarding beverage area closing procedures.
25. Match beverage preparation practices with their descriptions.
26. Select true statements regarding beverage presentation protocol.
27. Complete statements regarding beverage service tips.
28. Complete statements regarding the drink selection process.
29. Select true statements regarding the use of alcohol in food preparation.
30. Match types of fermented beverages with their characteristics. (Assignment Sheet 1)
31. Match types of distilled beverages with their characteristics. (Assignment Sheet 2)
32. Match glassware with their names. (Assignment Sheet 3)
33. Match bar tools with their names. (Assignment Sheet 4)
34. Name the beverage preparation process. (Assignment Sheet 5)
35. Prepare and evaluate coffee. (Job Sheet 1)
36. Build and stir an alcoholic beverage. (Job Sheet 2)
37. Blend an alcoholic beverage. (Job Sheet 3)
38. Tilt pour and flame an alcoholic beverage. (Job Sheet 4)
39. Layer an alcoholic beverage. (Job Sheet 5)
40. Muddle and build an alcoholic beverage. (Job Sheet 6)
41. Shake and strain an alcoholic beverage. (Job Sheet 7)

## Information Sheet

### Objective 1

#### Terms and definitions

✓ **Note:** Please refer to “Key terms” for definitions.

Alcohol	Fermentation	Mammary glands
Antioxidant	Flammability	Neat
Brewed	Fountain	Osmosis
Caffeine	Germinate	Pasteurized
Casks	Grading	Reconstituted
Catalyst	Grain	Refine
Coagulate	Gravity	Rocks
Concentrated	Grinds	Skim
Curd	HDL cholesterol	Spirit
Decaffeinated	Homogenized	Steep
Dehydrated	Hybrid	Stemmed
Dilution	Ignited	Sustenance
Disinfectant	Kegs	Tamped
Distillation	Liqueurs	Tap
Dollop	Liquors	Vaporizes
Effervescence	Malted	

### Objective 2

#### Relationship between food and alcoholic beverages

✓ **Note:** This unit covers distilled beverages and all fermented beverages, except wine. Information regarding the fermented beverage wine will be covered in the next unit, *Unit 2: Wine*.

#### Key term:

- **Alcohol**—Colorless liquid that is the byproduct of fermented sugars and starches; is the intoxicating agent in fermented beverages

- a. **Alcohol** first used to wash down food with a meal
- b. Relationship between food and alcoholic beverage goes back further than 1000 BC
  - Egyptians may have been first to brew beer for religious purposes
  - Chinese strengthened alcohol content of wine rice by trapping the vapors when heating the liquid
  - The production of alcohol has found its way through many cultures and civilizations to become a mainstay at tables and taverns around the globe

## Information Sheet

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### Objective 3

- The word alcohol dates back to early Arabic times from the word “al-koh’l”
  - Originally, the word refers to a fine metallic powder used as a cosmetic
  - Came to mean a “product that was highly refined”
  - At the time, the word transitioned into efforts to refine their favorite spirits from various plants and other organic ingredients
- c. Food and alcoholic beverages complement each other
  - Beverage enhances a meal by complementing food flavor
  - Provides a celebration-type atmosphere
  - As people relax from consumption, they become more friendly during a meal
- d. Beverages have found their place next to the plate for a variety of reasons
  - Family meals
  - Religious ceremonies

### Milk

#### Key terms:

- **Curd**—Cheese-like substance made in milk that has “clumped” together
- **Dehydrated**—Product that has been dried and preserved by having all the moisture removed
- **Homogenized**—Milk that has been processed so it has an even consistency; heat treated so the fat doesn’t separate from the liquid and form a layer on top
- **Mammary glands**—Female milk-producing glands
- **Pasteurized**—A food product that has been heat treated to kill harmful bacteria, making it safer to consume
- **Skim**—Milk with most or all of its fat removed
- **Sustenance**—Nourishment from food that supports life

- a. Is a white nutritious liquid secreted by the **mammary glands** of female animals
- b. Used as **sustenance** for baby mammals and nourishment by adult human beings

## Information Sheet

- c. Major source of calcium; strengthens bones and teeth and prevents osteoporosis
- d. Cow's milk is the most commonly consumed milk in the U.S.; goat's milk is also easily attainable
- e. After leaving the animal, milk is heat treated
  - **Homogenized** milk
    - Hot milk is forced through small nozzles
    - Heat breaks up butterfat globules and distributes evenly
    - ✓ **Note:** Fat in milk is also called "butterfat."
    - Cream cannot separate from the milk to the top
  - **Pasteurized** milk
    - Heated to 72 degrees Celsius for 15 seconds
    - Heat destroys pathogenic germs and spores
  - Ultra pasteurized milk
    - Heated to 132 degrees Celsius for one second
    - Has a longer shelf life than with regular pasteurization
- f. Heat treated milk content varies according to species of plant or animal
  - Type of protein
  - Proportion of protein, fat, and sugar
  - Level of vitamins and minerals
  - Size of butterfat globules
  - Size of milk **curd**
- g. Name indicates butterfat content left in the milk
  - Cream (light or table cream) contains 18-36 percent fat
  - Half and half is half milk and half cream; contains 10-18 percent fat
  - Whole milk contains 3.5 percent fat

## Information Sheet

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- Reduced or low-fat contains 2 percent fat
- **Skim** or nonfat is 0.5 percent fat
- h. Special milks
  - Acidophilus milk
    - Tastes the same as ordinary milk, but has been specially treated
    - Used in the production of yogurt
    - Retains the beneficial acidophilus bacteria that is killed during pasteurization
    - Health benefits include reduction of yeast infections in women, gastrointestinal disorders, and weakened immune systems
  - Condensed (evaporated) milk
    - Milk condensed, but not enough to become **dehydrated**
    - Is still sold as a liquid
    - Has higher calories and nutritious benefit per serving than regular milk
    - Required to be sold as 7.9 percent milkfat
    - Has a longer shelf life than fresh milk
  - Dehydrated milk
    - Ninety-six percent of the water removed from it
    - Has been partially dehydrated into a powder
    - Must be reconstituted with water
    - Has a longer shelf life and costs less than fresh milk
    - Often comes in bulk
  - Lactose milk
    - Has been processed to transform the lactose into glucose and galactose to increase its digestibility
    - Often used by people who are lactose intolerant (or have stomach upset after consuming milk)

- Organic milk
  - Comes from cows that have been grown and raised without the use of steroids and hormones
  - Costs more than inorganic milk
- Soy milk is growing in popularity
  - Milk comes from bean on a soybean plant
  - Made when soybeans are ground with water and the fluid is filtered out for consumption
  - Due to negativity associated with hormones used to raise cows, many consumers are opting for soy milk
  - Is being sold more commonly in dairy cases at grocery stores
- Sweetened condensed milk
  - Has been partially dehydrated and then had sugar added
  - Often used in cooking
  - Served in coffee beverages
- Vegan milk
  - Does not come from an animal
  - Soy and rice milk are popular vegan milks
  - Consumed by people who are allergic to animal milk
  - Popular with vegetarians

### Objective 4

#### Soft drinks

##### Key terms:

- **Caffeine**—A stimulant found in some drinks and foods; consumption temporarily increases energy levels
- **Fountain**—A drink that comes from a machine that mixes soda syrup and carbonated water

- a. Are made up of mostly water; the better the filtering of the water, the higher quality the beverage

## Information Sheet

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- b. Commonly used names (besides soft drink)
  - Soda in the South, Midwest, and California
  - Pop in the Midwest and Pacific Northwest
  - Coke in the South
  - ✓ **Note:** Because the word “coke” is often synonymous with the soft drink brand “Coca-Cola®,” servers often need to clarify whether the customer actually wants a soft drink, or specifically a Coca-Cola brand soft drink.
  - Soda pop across the United States
  - Tonic in Boston, Massachusetts (particularly among older Americans)
  - Dope among older generations of southerners
- c. Preparation process
  - Canned or bottled soft drinks
    - Produced at a factory
    - A sugary syrup base made of berries, herbs, and sweeteners is added to the filtered water
    - A carbonator adds carbon dioxide to the soft drink, which creates fizz or bubbles; soft drinks that lack fizz are said to taste “flat”
    - The pressurized liquid is packaged at a factory
  - **Fountain** drinks
    - A business establishment will purchase syrup pouches and carbon dioxide tanks for each soft drink flavor they wish to sell
    - Employees of the establishment will connect the hoses on the carbon dioxide tank to the syrup pouch; another hose will run the prepared soda to the dispenser
    - The prepared soft drink is poured from a “gun” type dispenser into a cup
    - This method is more cost effective for businesses that sell a lot of soft drinks

- d. Is sold served cold (with ice and/or refrigerated) in the United States, while it is commonly served at room temperature in European countries
- e. “Diet” soft drinks are made with artificial sweeteners, such as aspartame or saccharin; usually have low or no calories
- f. Soft drinks contain no nutritional value
- g. Most are high in **caffeine**; some manufacturers offer caffeine-free varieties
- h. Many people prefer to drink soda through a drinking straw
- i. Customers, especially children, may ask for a combination of various soft drink flavors
  - All flavors/brands of soda poured into one cup
  - Commonly called a garbage soda, graveyard, pop bomb, suicide, or swamp water

Objective 5

Tea

**Key terms:**

- **Antioxidant**—Substance that prevents cells from aging or becoming cancerous
- **Brewed**—Tea prepared by soaking in very hot water; beer prepared by the steeping, boiling, and fermenting process
- **Dilution**—Reducing the strength of beverages by adding water
- **HDL cholesterol**—High Density Lipoproteins; lipids in the blood that can be either helpful or harmful to heart health
- **Hybrid**—A product made from a mixture of similar elements
- **Steep**—To soak in a liquid

- a. Prepared tea characteristics
    - Behind water, tea is the second most consumed beverage in many foodservice establishments
    - Factors effecting prepared tea quality
      - Proportion of tea to water
      - Freshness of boiled water used
      - Care in brewing
- ✓ **Note:** Do not allow tea to boil.

## Information Sheet

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- The container that tea is **brewed** in can effect flavor
  - ✓ **Note:** Only use pottery, china, glass, or stainless steel containers for brewing tea.
- Factors effecting prepared tea taste
  - Allowance made for **dilution** by ice when making iced tea
  - While tastes vary, flavor should never be bitter
  - Aroma should be pleasing
  - Strength should be medium as indicated by a light brown, golden color
    - ✓ **Note:** The color will vary slightly with the type of tea being used.
  - Appearance should be clear, with no visible particles or oiliness
  - Temperature should be hot for hot tea and cold for iced tea
- All types of teas are studied for their possible health benefits
  - **Antioxidant** (cancer-fighting) properties
  - Thought to lower bad **HDL cholesterol** without decreasing good HDL cholesterol, resulting in possible reduction of heart attack and stroke
  - Green tea in lotions is said to reduce chance of sun damage
  - The fluoride and catechins in oolong tea is thought to strengthen teeth and prevent cavities
- b. Types of tea
  - Tea is the dried and processed leaves of the plant species camellia sinensis
  - There are three main varieties of the camellia sinensis species
    - The China (also called Assam) thrives in higher altitudes and sports smaller leaves
    - The India thrives in lower altitudes and features larger leaves
    - The **Hybrid** is a combination of the China and the India varieties

- When *camellia sinensis* is processed, the result is usually one of four main teas
  - ✓ **Note:** Herbal teas or herbal infusions usually do not contain *camellia sinensis*, but simply are made up of spices, dried flowers and/or herbs
  - White tea
    - Called “white” because the dried buds have a silvery appearance
    - Lowest amount of caffeine
    - Highest antioxidant properties
    - Least processed variety
    - Flavor is compared to leaves or fresh grass
  - Green tea
    - Dried leaves have a green appearance
    - Low caffeine
    - High antioxidant
    - Flavor is comparable to leaves or fresh grass
  - Black tea
    - After dried, the leaves have a black appearance
    - Highest in caffeine
    - Lower antioxidant properties
    - The popular “chai” is a black tea
      - a. Chai is black tea that is brewed strong with a combination of spices (usually cinnamon, cardamom, cloves, pepper, and ginger) and is diluted with milk and sugar
      - b. Chai latte is spiced tea mixed with milk that’s been steamed in an espresso machine

## Information Sheet

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- Oolong tea
  - Dried tea leaves have a color that is between the green and black tea colors; almost a reddish appearance
  - Most difficult tea to process
- c. Hot tea
  - Hot tea preparation
    - Tea is brewed by pouring very hot water over the tea leaves or bags and allowing it to **“steep”** or sit untouched in a ceramic teapot or cup for approximately two minutes
    - To make hot tea, many restaurants will pour hot water from the coffee machine directly into a ceramic cup with a tea bag inside
- d. Iced tea
  - Two traditional iced teas in the United States
    - Unsweetened or “black” tea is drank all over the United States
      - Brewed by pouring boiling water over tea inside a ceramic cup, teapot, or glass pitcher
      - “Sun tea” is made by pouring cold water into a glass container, putting tea bags in the water, putting a lid on the container, and then allowing it to steep in direct sunlight
      - Guests prefer their tea to steep to different consistencies
        - a. Darker tea has an acidic, coffee-like flavor
        - b. Lighter tea is more watered down and has a less acidic flavor
    - Sweetened or “sweet” tea is drank year round in the southern United States
    - Brewing is similar to hot tea
      - Bring sugar and water to a boil
      - Pour boiling water over the tea placed inside a ceramic cup, teapot, or glass pitcher
      - Allow the mixture to steep until it reaches desired consistency

### Objective 6

#### Water

##### Key terms:

- **Coagulate**—To thicken into a soft mass
- **Disinfectant**—Chemical that kills germs
- **Osmosis**—Fluid passed through a membrane (filter) to slowly change its concentration of ingredients
- **Rocks**—Served with ice
- **Tap**—Water that comes directly from the faucet

##### a. Water characteristics

- The human body is comprised of approximately 70 percent water
  - Water in the body is removed through the burning of energy
  - Activities that eliminate water from the body range from metabolizing and digestion to sweating and urinating
  - The average person is encouraged to replace the water in their body by drinking at least eight cups per day
- ✓ **Note:** While drinking water is the best way to replace the body's depleted water, all liquids and moist foods also contain water

## Information Sheet

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- At a molecular level, water is made up of two hydrogen atoms and one oxygen atom, creating the name “H<sub>2</sub>O”
- b. Fresh water sources in nature
  - Lakes
  - Rivers
  - Icebergs
- c. Making water potable (drinkable)
  - Water is often polluted in nature by humans, so it must be purified before human consumption
  - Untreated or improperly treated water can cause illness or death
  - Water purification methods
    - Reverse **osmosis**—Pressurized water is forced through a semi-permeable membrane
    - Distillation—Pure water molecules are separated from contaminants after a heat source vaporizes the water
    - Water filtration—Water passes over a series of filters to remove contaminants
  - Commonly used chemical additives
    - Chlorine serves as a water **disinfectant**
    - Fluoride is added to harden teeth
    - Flocculents **coagulate** water for easier filtration
- d. Water in hospitality establishments
  - Cleaning
  - Drinking water
    - **Tap** water from a faucet
    - Bottled water
    - Spigot on a soda machine

- All other liquids have water in them  
Examples: Milk, juice, soda, coffee, beer, distilled spirits
- Moist foods contain water  
Examples: Fruits, vegetables, meat, dairy products, breads
- Ice is needed to chill bottles of white wine, beer, soda, and to put in drinks
- Mixed alcoholic drinks served with ice are called “on the **rocks**.”
- Ice characteristics
  - Should be kept at 32° F or lower to remain frozen
  - Should appear clear and unmelting
  - Crushed ice melts quicker, thus diluting the drink
  - Ice should be free from dirt and particles
- For industrial purposes, both cracked and crushed ice is usually prepared in an ice machine

e. Serving water in hospitality establishments

- In the United States, water is often served in an eight ounce drinking glass filled with ice
- Some countries prefer their drinking water to be served at room temperature
- Because some people have teeth that are sensitive to cold temperatures, they may prefer to drink their cold beverages through a drinking straw
- Some restaurants put slices or wedges of citrus fruit in the water they serve customers

Examples: Orange, lemon, lime

## Information Sheet

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### Objective 7

#### Fruit and vegetable juices

a. Fruit juice

- Fruit juice is a common part of diets

✓ **Note:** Many fruit juice companies add a lot of sugar to their drinks to make them taste sweeter, therefore consumers wanting the healthiest drink should shop for “100 percent fruit juice” beverages.

- Provides fiber and many different vitamins and minerals
- One serving of juice is equivalent to a serving of fruit from the USDA Food Guide Pyramid
- Popular fruit juices
  - Apple
  - Orange
  - Grape
  - Cranberry
  - Lemonade
  - Limeade
- Fruit juices are often flavored by combining different fruit flavors  
Example: Orange pineapple apple juice, strawberry banana orange juice, cranberry apple juice

- Characteristics of fruit juices

- Sweetened juice has had sugar added for flavor vs. unsweetened
- Contains pulp (pieces of the fruit) vs. pulp-free

- Fresh fruit juice

- Made on-site by squeezing the juice from fruits into a glass or pitcher
- A common tool in squeezing juice from a piece of fruit is a “juicer”

- Frozen juice from concentrate
  - Juice has had most of the water removed prior to being sold
  - Juice is frozen and becomes slushy as it melts
  - After purchase, contents are dumped into a pitcher and water is added to make a juice
- Store bought juice packaging
  - Glass bottles
  - Plastic bottles
  - Squeeze boxes
  - Cardboard/plastic cartons
  - Cans
  - Cylinder cardboard tube with metal ends for concentrated juice
- Uses for fruit juice
  - Breakfast drink
  - Mixed with alcohol for a cocktail
  - Cooking; flavoring foods
  - Fruit smoothies (ice cream or yogurt, fruits, and juices blended together)
- b. Vegetable juice
  - Benefits
    - One serving is equivalent to a serving of vegetables from the USDA Food Guide Pyramid
    - Said to have antioxidant benefits
    - Replaces lost water and nutrients in the body
  - Uses
    - Breakfast drink

## Information Sheet

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- Base for alcoholic beverages

Examples: Tomato juice serves as the base for Bloody Marys and “red” beer (tomato juice, beer, and Tabasco sauce)

- Smoothie flavoring
- Salad dressings
- Marinades
- Soups
- Gravy
- Popular vegetable juices
  - Carrot
  - Celery
  - Corn
  - Pepper
  - Spinach
  - Tomato
- Garnishes for prepared vegetable drinks
  - Celery
  - Parsley
- Mix-ins or seasons for vegetable drinks
  - Pepper
  - Tabasco sauce
  - Alcohol

Objective 8

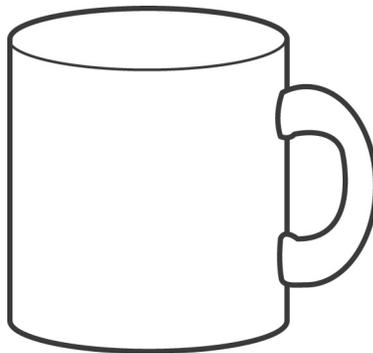
Coffee

**Key terms:**

- **Decaffeinated**—Beverage with all or most of the caffeine removed
- **Grading**—Category of product quality
- **Grinds**—Roasted coffee beans that have been crushed into very small pieces

- a. Coffee is usually served with breakfast, after dinner, or at meetings
- b. Often served in a ceramic 8 oz. coffee mug

Figure 1—Coffee Mug



Coffee mug  
(8 oz.)

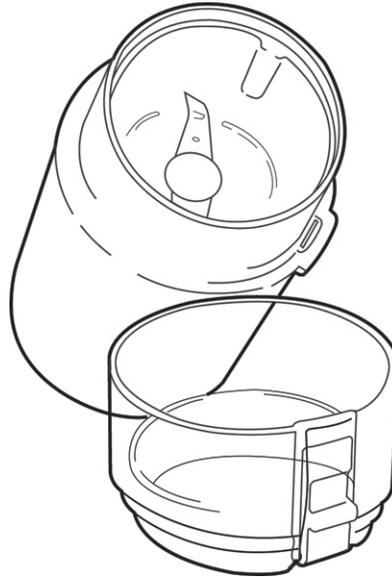
- c. Grinding
  - Coffee may arrive “instant,” meaning it is already ground and ready to put into a coffeemaker
  - Before being brewed to serve, whole beans must be ground
    - The smaller the beans are ground, the more flavorful the coffee will taste
    - When grinding, be careful not to heat the beans and make sure grind size is consistent
    - Grinding allows the insides of the beans to flavor the coffee water better

## Information Sheet

### — Types of grinders

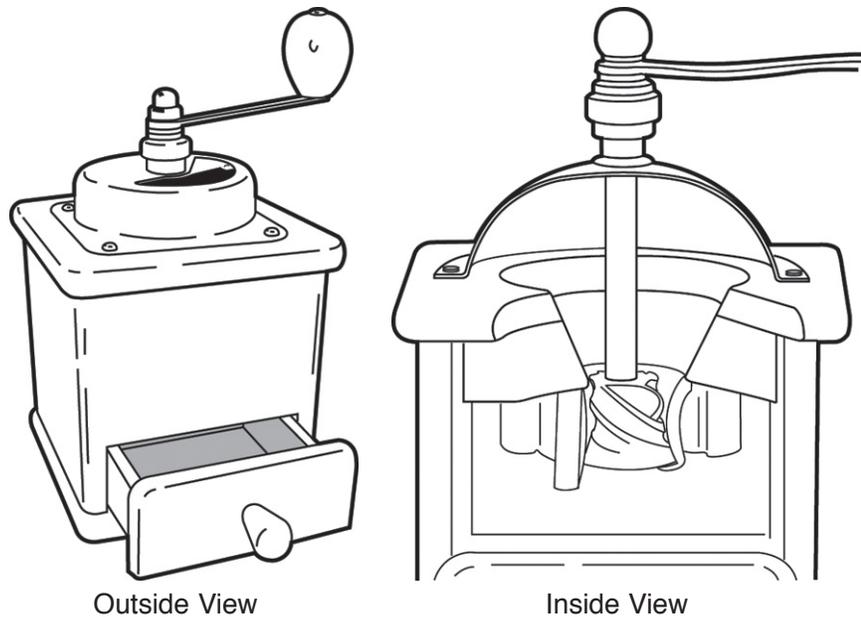
- Blade grinder—Does not grind beans uniform; good for use with brewers that use filter paper, such as Turkish ibrik

Figure 2—Blade Grinder



- Burr grinder—Grinds beans uniformly; good for use with any brewing method

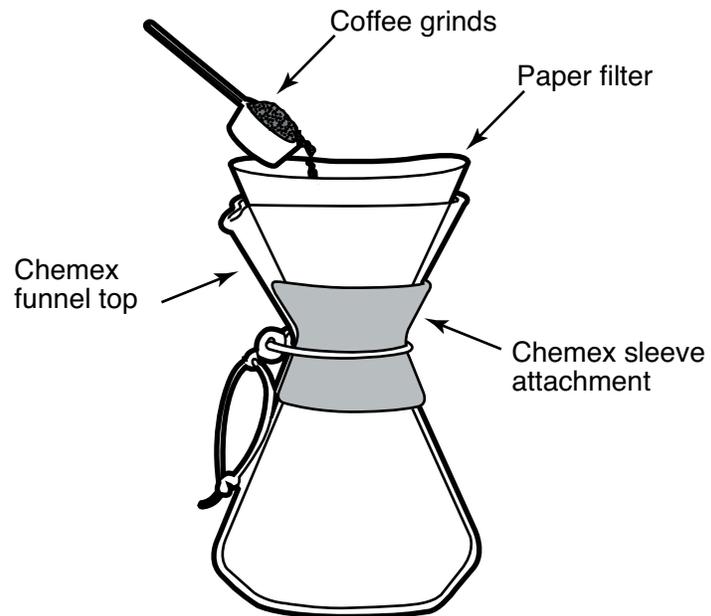
Figure 3—Burr Grinder



d. Brewing

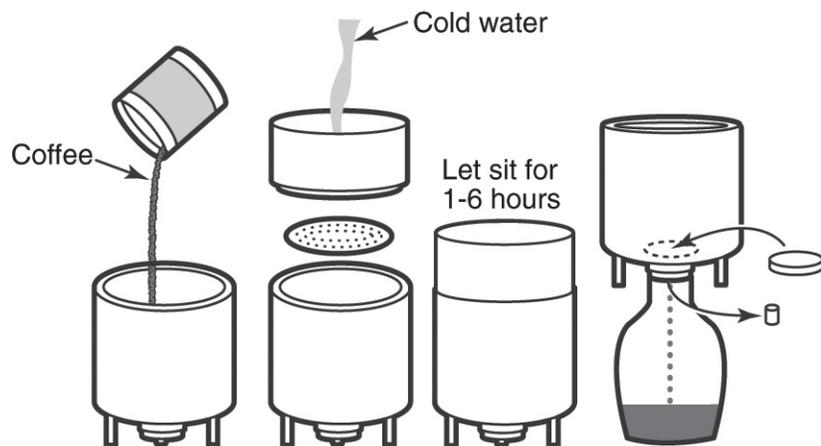
- **Grinds** can be brewed a variety of ways
  - A chemex is a glass pot with filter paper placed on top; grinds are placed in the filter paper and hot water is poured over them so it can trickle into the pot

Figure 4—Chemex Coffee Preparation



- Cold brewing involves allowing cool water and medium to course grinds to sit for 12-24 hours, then filtering out the grinds and drinking

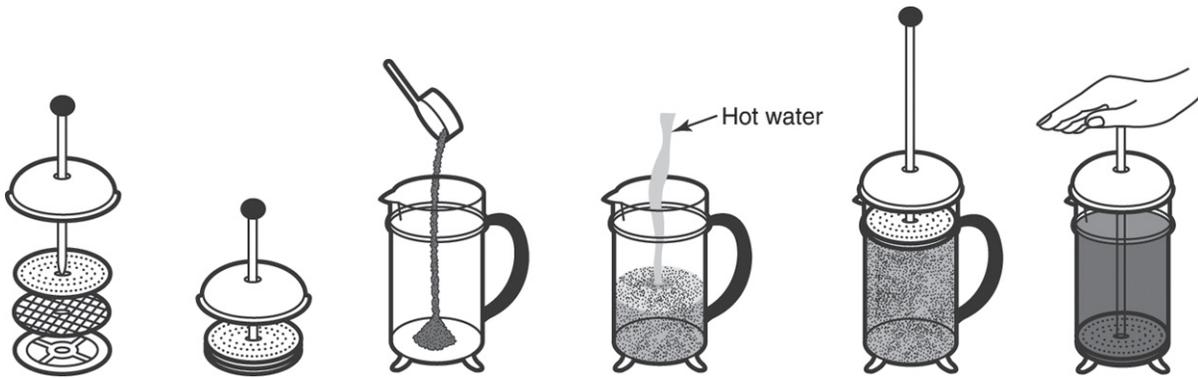
Figure 5—Cold Brewing Coffee Preparation



## Information Sheet

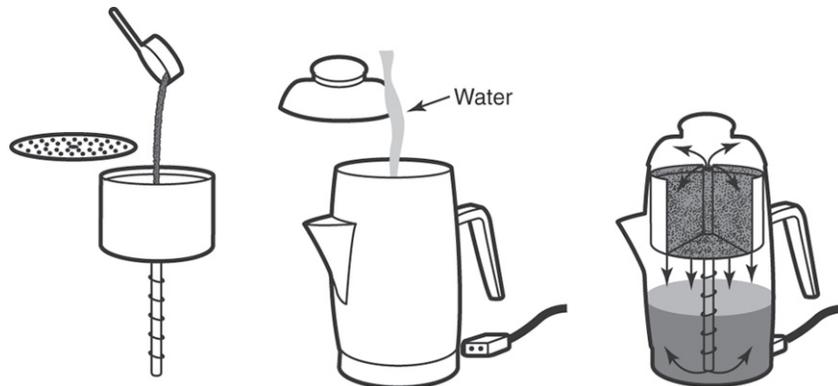
- French press preparation involves pouring hot water over medium to large sized grinds in a pot, then “plunging” the press to push the grinds to the bottom

Figure 6—French Press Coffee Preparation



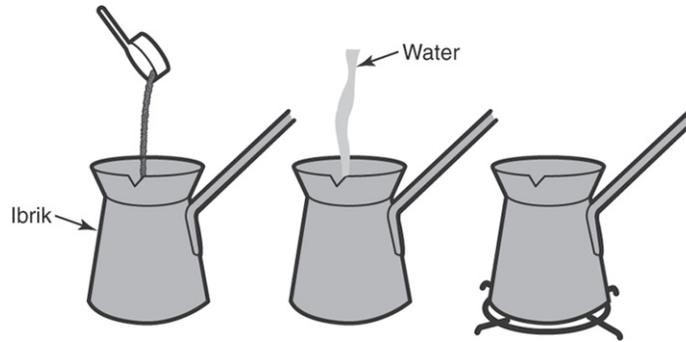
- Percolated coffee is made when boiling water rises repeatedly from the bottom of a “percolator” pot up through a tube, spills onto filter containing grinds and mixes with them, then returns to the pot below

Figure 7—Percolated Coffee Preparation



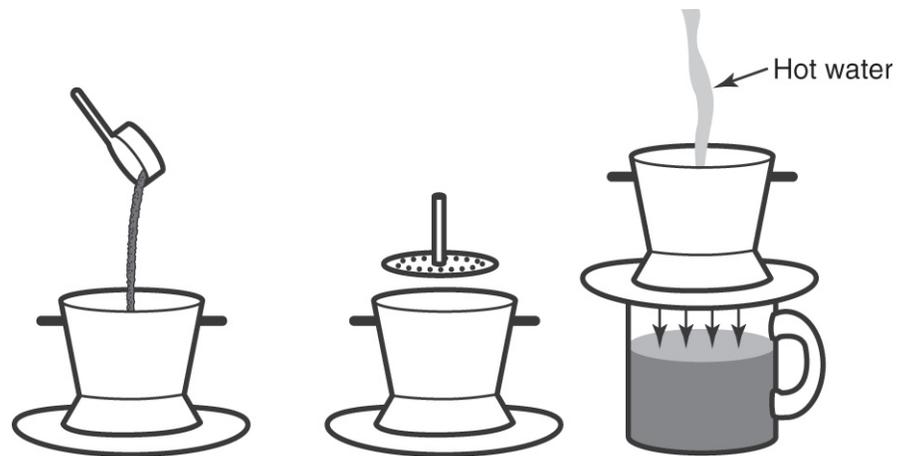
- Turkish coffee preparation involves putting sugar, finely ground beans, and water in a metal “ibrik” pot over a heat source until it foams

Figure 8—Turkish Coffee Preparation



- Vietnamese coffee is made when coffee grinds are placed in a cup with holes in the bottom; hot water is poured over the grinds, and the mixture passes through the holes and a filter, finally straining into a cup with milk in it

Figure 9—Vietnamese Coffee Preparation



- e. Most often served with small amounts of cream, milk (including skim for low-fat option), sugar, and/or sugar substitute
- f. Flavors
  - Each region of the world has its own distinct coffee bean flavor
  - Arabica coffee beans are considered higher quality; more refined flavor; beans come from inside the berries on mature evergreen Arabica trees

## Information Sheet

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- Robusta coffee bean species is cheaper to produce; has a harsher flavor
- Coffee “blends” feature beans from two or more different geographic regions

- Flavoring can be added to grinds for a customized taste

Examples: Irish hazelnut, almond, amaretto, French vanilla, toffee, chicory root

### g. Bean **grading** specifications

- Size of the bean
- Altitude of the region where the bean was grown
- How the bean was prepared and picked
- “Cup quality” or how good it tastes

### h. Characteristics of prepared coffee

- Taste should be mellow, not bitter
- Acidity in coffee refers to “tanginess” of coffee on the palate
- Appearance should be a rich brown color with no visible particles or oiliness
- Aroma is the way the coffee smells; it should be pleasing
- Body refers to the way the tongue senses “fullness” or “lightness”
  - Full or heavy bodied coffee tastes thicker or heavier on the tongue
  - Light bodied coffee doesn’t feel as “heavy” on the tongue
- ✓ **Note:** When referring to “heavy” or “lighter” bodied coffee, the liquid is not actually thicker or thinner—the tongue merely senses the coffee’s body.
- Flavor refers to the combined acidity, aroma, and body; should be fresh, not stale
- Caffeinated (“caf”) or **decaffeinated** (“decaf”)
  - ✓ **Note:** Caffeine in drinks can cause some individuals to have surges of energy, become nervous or jittery, have trouble sleeping, experience heart palpitations, or have other health problems. Therefore, some people prefer to drink decaffeinated beverages.

- Strength, or the amount of coffee to water, should be medium
- Temperature should be hot when served
- The color of coffee can allow a common observer to predict its flavor
  - Dark colored blends taste “smoky”; black coffee has the smokiest flavor
  - Lighter colored blends taste “smoother”

i. Factors affecting prepared coffee quality

- Type and condition of ground coffee
  - Blend
  - Suitability to equipment
  - Freshness
    - ✓ **Note:** Freshness deteriorates rapidly after grinding or opening package; protect from heat, moisture, and air. Tightly closed coffee may be stored in the refrigerator or freezer.
- Proportion of water to ground coffee
- Care in preparation
- Holding temperature
  - ✓ **Note:** Coffee should be held at 180° Fahrenheit. Never allow brewed coffee to boil.
- Care of equipment
  - ✓ **Note:** Oils that are not removed in the cleaning process will build up and cause bitterness.

### Objective 9

#### Espresso drinks

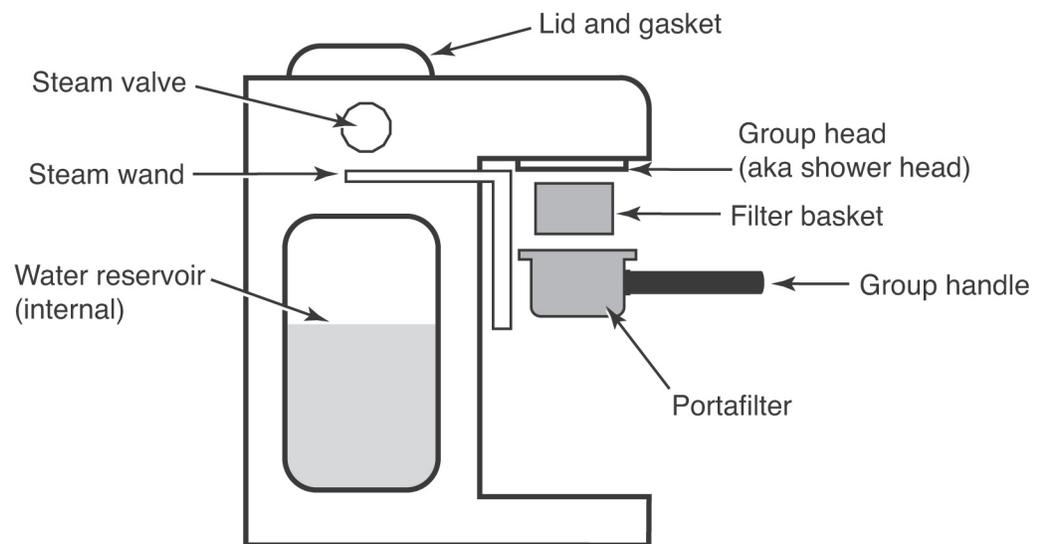
##### Key terms:

- **Concentrated**—To make a substance thicker or stronger by removing the water
- **Dollop**—Spoon-sized quantity of a thick substance
- **Tamped**—When a substance is compacted by repeated tapping or pushing

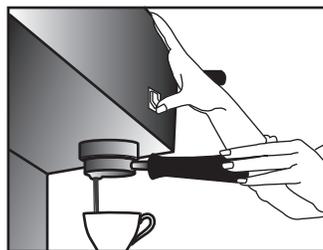
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- Espresso is called “caffè” in Italy
- A trained espresso bartender is called a “barista”
- Espresso is a small, concentrated coffee beverage that is served immediately after being prepared
- Made in a special espresso maker by forcing hot water under high pressure through a coffee bean “cake” made of finely ground beans that have been **tamped** together
- One “pull” of espresso refers to the downward pulling on a lever to cock a spring in a piston group on an espresso machine

Figure 10—Espresso Machine Components and Process



Tamped Coffee Bean Cake



A Pull of Espresso



Espresso Pouring  
Into a Demitasse

- ✓ **Note:** Many automatic espresso makers today are programmed to pull the correct amount of time and content
  - The shorter the length of a pull, the less water in the drink for a more **concentrated** coffee flavor
  - The longer the length of a pull, the more water in the drink for a less concentrated coffee flavor

## Information Sheet

- f. Pressure from the pull creates a golden foam on top of the drink called “crema” or “mocha cream”
- g. Served in a small porcelain cup called a demitasse

Figure 11—Demitasse



Demitasse  
(2-3 oz.)

- Holds 2-3 fluid ounces
  - Is sometimes pre-heated to keep the drink from getting cold
- h. Customers order espresso by the “shot”

Table 1—Espresso Shot Characteristics

Shot Name	Ounce	Characteristics	Drink Creation
Ristretto	0.75 – 1 oz.	<ul style="list-style-type: none"> <li>• Smallest espresso shot</li> <li>• In Italian, ristretto means “shrunk” or “short”</li> <li>• Very strong coffee content</li> <li>• Is made with the same amount of coffee as a single (7 grams) and less water (0.5 oz.)</li> </ul>	<ul style="list-style-type: none"> <li>• Less than one pull</li> <li>• Pull lasts 10 – 15 seconds</li> </ul>
Single	1 – 1.25 oz.	<ul style="list-style-type: none"> <li>• Called a “single shot” or an “espresso”</li> <li>• Contains 7 grams of ground coffee</li> <li>• Contains 1 – 1.5 fluid oz. of water</li> </ul>	<ul style="list-style-type: none"> <li>• Equivalent to one shot</li> <li>• Is exactly one pull</li> <li>• Pull lasts 18 – 23 seconds</li> </ul>
Doppio	2 – 2.5 oz.	<ul style="list-style-type: none"> <li>• In Italian, doppio translates to “double”</li> <li>• Contains 14 grams of ground coffee</li> <li>• Contains 2 – 2.5 fluid oz. of water</li> </ul>	<ul style="list-style-type: none"> <li>• Equivalent to two shots</li> <li>• Consists of two separate pulls combined together to prevent over-watering</li> </ul>
Lungo	5 – 6 oz.	<ul style="list-style-type: none"> <li>• In Italian, lungo translates to “a long”</li> <li>• Drink is diluted with extra water during the long pull</li> </ul>	<ul style="list-style-type: none"> <li>• One pull is allowed to run longer</li> <li>• Pull lasts 25 – 30 seconds</li> </ul>

## Information Sheet

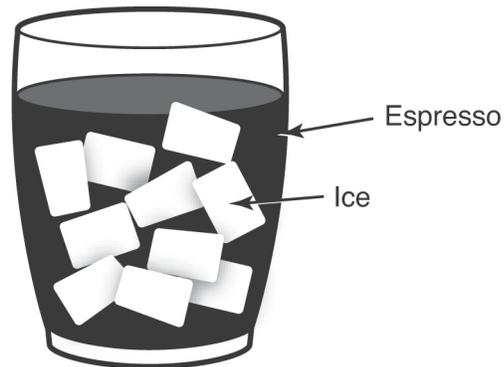
- i. Espresso is the foundation for other coffee drinks

Figure 12—Espresso "Doppio"



- If called "Caffe Americano," hot water is added directly to a prepared espresso shot (instead of a lungo shot being pulled)
- Correcto espresso has a touch of cognac, sambuca, or other spirit added
- Caffe freddo

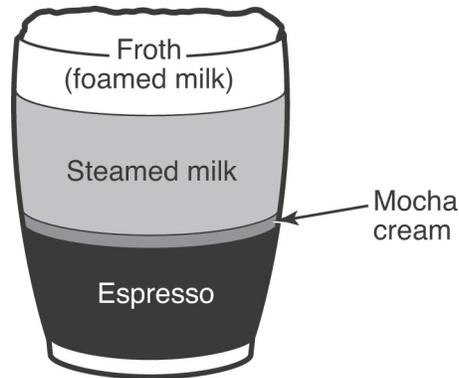
Figure 13—Caffe Fredo



- Also called "iced espresso"
- Espresso is prepared then sweetened and chilled
- Often served on ice

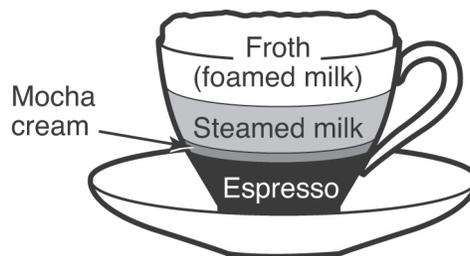
- Latte (or Caffelatte) is made with 1 part espresso and 2 parts steamed milk

Figure 14—Latte



- Cappuccino is made 1 part espresso, 1 part steamed milk, and 1 part frothed milk

Figure 15—Cappuccino



- Cappuccino scuro (dry or dark) is prepared with less milk than usual
  - Cappuccino chiaro (wet or light) is prepared with more milk than usual
  - Cappuccino freddo (iced) is served on ice
- Macchiato is espresso “stained” with a **dollop** of steamed milk
  - Con panna is espresso served with a dollop of whipped cream
  - Mocha (or caffe mocha) is made with espresso and cocoa mixed together; it’s sometimes served on ice
- j. Common coffeehouse drink sizes
- Short—8 oz. beverage
  - Tall—12 oz. beverage
  - Grande—16 oz. beverage

## Information Sheet

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### Objective 10

#### Hot cocoa and hot chocolate

##### Key term:

- **Reconstituted** – Material brought back to its original state by adding liquid

- a. Characteristics of hot cocoa and hot chocolate
  - Served in a ceramic coffee mug
  - Garnished with whipped cream or marshmallows
  - Should be served hot, with steam rising from the mug
  - Popular winter beverage
  - Should taste rich and chocolaty, never bitter
  - Beverage should be free of oils or floating debris
- b. Hot cocoa is made from cocoa powder, or chocolate pressed free of all its cocoa butter fat
  - Dry mix
  - **Reconstituted** by adding hot milk or water to the powder and stirring
- c. Hot chocolate is made from chocolate bars melted into cream
  - Chocolate is melted
  - Hot milk or water is stirred into the chocolate

### Objective 11

#### Beer *fermentation* process

##### Key terms:

- **Casks**—Wooden barrels containing alcoholic beverages
- **Catalyst**—Substance that modifies or increases a reaction
- **Effervescence**—Liquid that produces tiny gas bubbles; often has accompanying foam and makes a soft hissing noise
- **Fermentation**—Process in which sugar is converted to alcohol; yeast is often the catalyst; other organic ingredients are also used
- **Germinate**—To begin to grow from a seed into a new plant
- **Grain**—Small, hard seed that is capable of producing a new plant
- **Kegs**—Aluminum barrels used to store and transport beer
- **Malted**—Made with grain, especially barley
- **Refine**—Removing impurities from a product to make it purer

### a. Fermentation of all beverages

- Is a natural process of using organic elements (yeast, enzymes, mold, bacteria) to convert sugar from food (usually grain or fruit) into alcohol
- Most commonly used in wine, beer, and cider making
- Most distilled beverages contain ingredients that must be fermented before they can be distilled
- During the process of fermentation, the grain mixture takes in oxygen (O<sub>2</sub>) and releases carbon dioxide (CO<sub>2</sub>)
- Fermentation can be started with use of various organic elements
  - Yeast
  - Enzymes
  - Bacterium
  - Molds

### b. Beer fermentation ingredients

- **Grain**
  - Most common grain used in beer-making is barley
  - Other grains used include oats, rice, wheat, corn, and rye
  - Made into a malt by soaking the grain in water, allowing it to **germinate**, and then letting it dry
  - Is **malted** to create the necessary enzymes that allow starches to turn into sugar
- Water
  - Beer is mostly filtered water
  - Minerals in the water from the ground soil of the region the beer is made create a customized taste that cannot be duplicated in other parts of the world
  - Soft water is commonly used for lighter colored beers
    - ✓ **Note:** Soft water has had most of the dissolved salts removed.
  - Hard water is used to make darker colored beers
    - ✓ **Note:** Hard water retains its dissolved salts

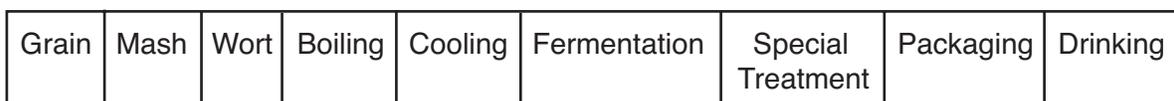
## Information Sheet

- Hops
  - Are flowers from a vine called *humulus lupulus*
    - Different varieties of hops have their own distinct flavor and aroma combinations
    - Oils from the flower balance out the sweetness of the malted grain
  - Add a bitter taste to the sugars in the brew
  - Cut the sweet aroma produced by the grain
    - Dried hops are added to a brew
    - Bitter flavor comes out during the boiling portion of the brewing process
- Yeast
  - Converts sugars in the wort into alcohol
  - Each strain of yeast adds its own flavor to the brew
    - Phenols impart a spicy flavor
    - Esters allow for a fruity taste
    - Diacetyls provide a woody flavor
  - Top fermenting yeasts ferment at the top of the vessel and bottom fermenting yeasts ferment at the bottom

### c. Beer brewing process

- ✓ **Note:** The creation of a beer, from grain mashing to bottling, is called “brewing,” not to be confused with a step in the process, “fermentation.”

Figure 16—Beer Brewing Process



Beer Brewing Process, From Start to Finish



- *Mash*—Crushed malt (usually from barley), water, and a cereal product are soaked in warm water to create a malt extract, called “mash”

- *Wort*—The solids dissolve, whereupon the malt enzymes convert starch to sugar; mixture called wort
- *Boiling*—Wort is put in copper pot and boiled (with any extra ingredients) to remove excess water and kill bacteria; hops are added
- *Cooling*—Mixture is transferred to an area where it can cool and settle
- *Fermentation*—After settling, mixture is transferred to fermenting vessels. Yeast is added, where sugar is converted to alcohol and carbon dioxide creates **effervescence**
- *Special treatment*
  - *Aging*—Some beers are aged for years in wooden **casks** to **refine** the flavor
  - *Filtering*—Cold filtered beer has been filtered to remove sediments prior to bottling
  - *Ice filtering*—Eisbock beers (also called ice beers) have been frozen after fermentation, then had the ice crystals filtered out; this removes all the water, raising the alcohol content
- *Packaging*—Bottles, cans, **kegs**, and casks
- *Drinking*—Beer is ready to be sold to pubs, restaurants, liquor stores, grocers, and other consumers

### Objective 12

#### Types of beer

- a. Ale beer
  - Made with top fermenting yeasts
  - Brewed at warmer cellar temperatures of 50-70° Fahrenheit
  - Fuller bodied flavor with traces of fruit or spice and a hoppy flavor
  - Darker color than lager, with colors ranging from rich gold to reddish-brown
  - Served with strong flavored foods, such as red meat or sausage

## Information Sheet

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- Common specialty ales
  - Barley wine
    - Has the same alcohol percentage as wines
    - Copper to medium brown color
    - Sweet flavor offset by strong hops
  - Pale ale
    - India origin
    - Highly hopped flavor
    - Light color
  - Porter
    - Roasted malt flavor
    - London origin
    - Very dark color
    - Very bitter flavor
- b. Lager beer
  - Primarily considered a “German” beer
  - Made with bottom fermenting yeasts
  - Brewed for a longer period at cooler temperatures, 30-50° Fahrenheit
  - Has a smoother flavor than ale created by the cooler brewing temperature
  - Lager is stored at near-freezing temperature for several months before drinking
  - Has a pale gold color, is carbonated and lightly hopped
  - Served with lighter foods, such as grilled chicken or seafood

- Two main types of lagers
  - Pilsner lagers
    - Originated in Czech Republic
    - Most American beers are Pilsners
    - Have a pale to golden yellow color
    - Flavor is mostly hops
  - Bock lagers
    - Originated in Germany
    - Stronger hops taste
    - Dark yellow color
- Common specialty lagers
  - American
    - Watery tasting beer for mainstream consumption
    - Weak color and flavor (compared to foreign beers)
    - Includes “light” varieties made with corn or rice syrup added during fermentation to lower calories
  - Dunkel
    - German dark beer
    - Is a pale lager with roasted malt
    - Roasted malt adds dark color and chocolaty flavor
  - Oktoberfest
    - Often labeled “Marzen” for the month (March) when the Germans historically ceased production and drank up all old stock to create room in storage
    - Heavy beer
    - Amber colored
    - Sweet flavor from the malt

## Information Sheet

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- c. Hybrid beers are a blend of lager and ale, often flavored
- d. Lambic beer
  - Belgian origin
    - ✓ **Note:** Belgian beers originally were brewed by monks in monasteries. While some monasteries still brew and sell their own beer, the market has increasingly opened up to private breweries.
  - Brewed from 70 percent barley malt and 30 percent unmalted wheat
  - After cooling, wort is exposed to the open air to introduce over 80 wild, air-borne yeast native to the Senne Valley in Brussels
  - Flavor ranges from sweet to vinegary/sour
  - Four main types of lambics
    - Pure lambic is a one year-old beer served on tap; it is cloudy, uncarbonated, and has a mildly sour taste
    - Gueuze lambic is a bottled mixture of young and old; it is refermented a second time after bottling, where carbon dioxide is produced
    - Faro lambic is a low-alcohol content, slightly sweet beer; crystallized or caramelized sugar added; is unblended and aged three years; usually served on tap
    - Fruit lambic is a sweet lambic beer with whole fruit or syrup added, then refermented a second time in the bottle; popular flavors include sour cherry (kriek), raspberry (framboise), peach (peche), black currant (cassis), grape (druif), or strawberry (aardbei); rarer flavors include banana, pineapple, apricot, plum, and lemon

e. Other specialty beer flavors

Table 2—Specialty Beer Characteristics

Specialty Beer	Flavor & Characteristics	Color
Amber	Full-bodied, tastes of malt and hops	Rich golden “amber” color
Bitter	Largely tastes of hops, bitter flavor, high alcohol content	Pale yellow color
Dark	Rich, strong flavor	Dark coffee color
Dry	Sweet from rice or corn syrup added during fermentation; crisp flavor, little aftertaste	Medium yellow color
Fruit or Vegetable	Tastes like the fruit or vegetable from which it is flavored	Colored like the beer it originated from, but has a faint to strong hint of color from the fruit or vegetable from which it is flavored
Herb/Spice	Various herbs or spices added to beers of varying flavors	Usually the color of the original beer, sometimes can have a faint hint of color from the herb or spice from which it is flavored
Light	Light beer in the U.S. means it has less than 100 calories; in all other countries, it means the beer contains a lower alcohol content per volume; usually has a milder or more water-based flavor	Usually lighter yellow colors
Smoked (also called Rauchbier)	Smoke absorbs into the malt during mashing step; smoky taste	Smoky brown color
Stout	Brewed with highly roasted malts; malt and caramel flavors, depending on variety; can be sweet, dry, or bitter	Deep, dark color
Wheat (also called Weizen)	Heavy German beer, made from malted wheat and barley	Medium yellow to orangish-yellow color range

## Information Sheet

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### Objective 13

#### Other fermented beverages (besides beer)

- a. Cider (also called hard cider or alcoholic cider)
  - Made from the fermented juice and pulp of apples
  - Popular flavor variations include amber, dark, dry, pear, Granny Smith, and raspberry,
  - Stronger than beer, at 6 percent alcohol per volume
  - Tastes range from sweet to dry
  - Clear colored cider indicates it has been processed more and contains a lower alcohol content
  - Cloudier ciders have a higher alcohol content, as they have more apple content and are less processed; are called “scrumpy” ciders
  - Served on-tap or in colored glass bottles with crown metal caps
- b. Sake
  - Japanese word for “alcoholic beverage”
  - Commonly refers to beverage made from fermented starch
    - Rice
    - Sugar cane
    - Potato
  - Served hot, warm, or cold
- c. Mead
  - Created from fermented honey and water
  - Predates wine and beer
  - Also called “honey wine”
  - Can be mulled with spices

Objective 14

**Distillation process**

**Key terms:**

- **Distillation**—Process where a liquid base is heated to concentrate the contents
- **Spirit**—Strong alcoholic drink made from distillation
- **Vaporizes**—When something turns into a gas or tiny moisture particles

a. Difference between the two basic processes for making consumable alcohol

- Fermentation is a natural process of using organic elements to convert sugar from food into alcohol

Examples: Beer, wine

- Distillation is the process of separating, concentrating, or purifying liquid food by boiling it and then condensing the resulting vapor

Examples: Vodka, whisky

✓ **Note:** Distilled beverages are created from the liquid result of fermentation.

b. Distilling concentrates the alcohol

- A “wash” is created when organic materials are fermented and the liquid is drained off
- The wash, or sugary liquid base, is then chemically changed into concentrated alcohol vapors by distillation

✓ **Note:** The liquid base consists of 12-15 percent sugar, the rest mostly water.

Example: To make vodka, grains/vegetables first are fermented by being mashed, mixed with water, and heated to create wort. The heat causes the starches from the organic material to escape into the water as sugar. The liquid is drained off and passed through a still.

- Liquid base is heated so it **vaporizes**
- Vapor condenses as it cools

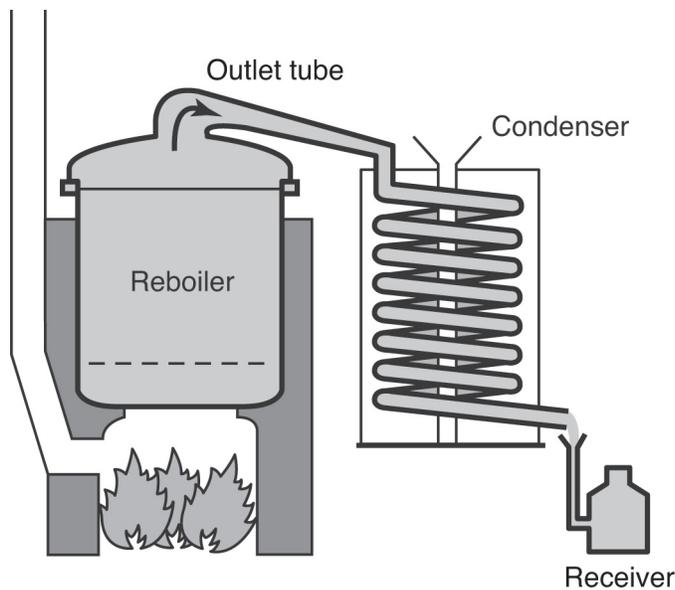
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- After cooling, vapor condenses as another liquid
  - Has a higher alcoholic content
  - Alcohol vaporizes before the water because it has a much lower boiling point

### c. Methods of distillation

- Equipment used to distill alcohol is called a “still”
  - Is usually made of copper, a metal which will not affect the flavor of the beverage
  - At a very minimum, a still will consist of three parts:
    - Reboiler pot to heat “source material” or wash
    - Condenser to cool the heated vapor to a liquid state
    - Receiver to collect the concentrated/purified liquid
- Pot still

Figure 17—Alcohol Distillation in a Pot Still



- Is the most basic still
- Large copper pot with heat source on the bottom or via steam coils

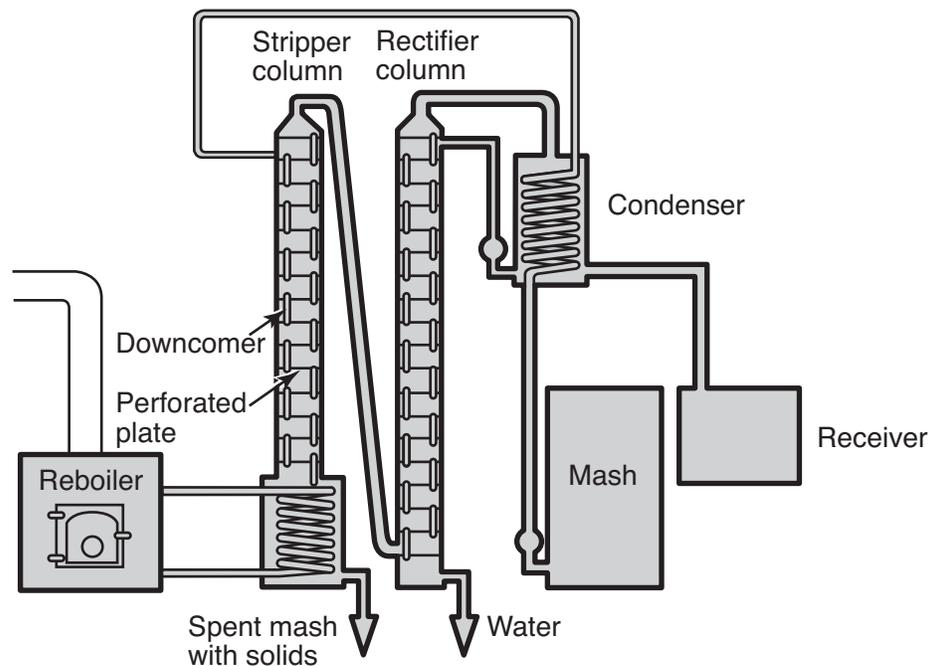
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- Pot narrows into a tube or bulb at the top to collect vaporized wash
- Tube bends downward and passes through a cold water bath, which recondenses the vapor into a liquid
- After cooling, alcohol drains into and collects in a container at the end of the tube

Examples: Straight malt scotches, cognacs and other brandies, some rums

- Continuous still (also called “column still”)

Figure 18—Alcohol Distillation in a Continuous Still



- Is the most common method
- Tall cylinder shaped copper column
- Steam comes in the bottom of the column
- Liquids are poured into the top of the column and collect at the bottom
- Filled with perforated plates that condense the wash and allow rising vapor to pass through

## Information Sheet

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- Rising vapor collects into a second column, where it is recirculated and concentrated into the correct percentage of alcohol

### d. Range of proof

- Proof is the method of measuring the alcohol content of a distilled **spirit**
- Measured by multiplying the percent of alcohol by volume by two

Example: A spirit that is 45 percent alcohol content by volume is 90 proof  
( $45 \times 2 = 90$ )

- When purchasing liquor abroad, U.S. gallons must be converted to proof gallons for tax purposes
  - Multiply U.S. gallons by percent of alcohol by volume
  - Multiply by 2
  - Divide by 100

Example: 50 U.S. gallons X 40 percent alcohol by volume = 2,000  
 $2,000 \times 2 = 4,000$   
 $4,000 \div 100 = 40$  proof gallons

- Quality factor is determined by quality of ingredients used
- Percentage of proof affects spirit flavor
- Regulated for most types of alcohol
  - Some set amounts or limits
  - Bourbon cannot be over 160 proof
- Blending
  - The initial base can vary from year to year, depending on the plant/fruit from which the spirit is made
  - Barrels from various warehouses or areas of a warehouse are often blended to make a more consistent flavor

Objective 15

Distilled alcohol characteristics

**Key terms:**

- **Liqueurs**—Sweetened beverages made of neutral distilled alcohol spirits combined with one or more aromatic flavoring substances; usually consumed after a meal
- **Liquors**—Distilled alcoholic spirits made from fermented plants and grains
- **Neat**—Drink that is not diluted with water, ice cubes, or a drink mixer

a. Distilled **liquors**

- Three levels of quality
  - Well quality (off brand)
  - Premium quality (name brand)
  - Top shelf (usually very expensive, ranging from \$50 to several hundred USD per 750 ml bottle)
- Served two ways
  - A shot is a small serving of pure liquor
  - A mixed drink (also called a cocktail) is liquor combined with another liquid, such as soda or fruit juice, and ice
- Characteristics of commonly stocked liquors

Table 3—Liquor Characteristics and Varieties

Liquor	Main Ingredients & Characteristics	Varieties
<p><b>Bourbon</b> (also see whisky)</p> <p>✓ <b>Note:</b> It is also called bourbon whisky or Kentucky whisky.</p>	<p>Minimum of 51 percent corn grain, plus small amounts of malted barley, wheat, and/or rye</p> <ul style="list-style-type: none"> <li>– Is aged in new, white oak barrels that have not been charred</li> <li>– Must be aged a minimum of two years</li> </ul>	<ul style="list-style-type: none"> <li>• <i>Small batch</i> comes from several different barrels that are mixed together</li> <li>• <i>Single barrel</i> comes pure, or straight from its original barrel</li> </ul>

# Information Sheet

Table 3—Liquor Characteristics and Varieties (*continued*)

Liquor	Main Ingredients & Characteristics	Varieties
<p><b>Brandy</b> (short for “Brandywine”)</p>	<p>White wine that has been:</p> <ul style="list-style-type: none"> <li>– Aged in oak barrels for several years</li> <li>– Red wine and other fermented fruit juices are also used</li> <li>– Name comes from area of France the brandywine was produced (Armagnac or Cognac)</li> </ul>	<ul style="list-style-type: none"> <li>• <i>Armagnac</i> is made in a single continuous copper still; aged in oak casks 12-30 years</li> <li>• <i>Cognac</i> is double distilled using pot stills               <ul style="list-style-type: none"> <li>– <u>Top Shelf</u>: VVSOP, Napoleon, Vieille Reserve, Grand Reserve, Royal, or Vieux</li> <li>– <u>Best</u>: Extra Old (XO), Extra, or Hors D’Age</li> <li>– <u>Better</u>: Very Superior Old Pale, Reserve, or VO</li> <li>– <u>Good</u>: VS or ***</li> </ul> </li> </ul>
<p><b>Gin</b></p>	<p>Vodka base flavored primarily with juniper berries; also coriander, angelica root, citrus, and other herbs and spices</p> <p>✓ <b>Note:</b> Gin has a very dry taste, so it is rarely drank by itself.</p>	<ul style="list-style-type: none"> <li>– <i>London Dry Gin</i> refers to gin that is high proof and has been produced in a column still and redistilled after flavorings added</li> </ul>
<p><b>Rum</b></p>	<p>Made from sugarcane by-products (molasses and sugarcane juice)</p>	<ul style="list-style-type: none"> <li>• <i>Light rums</i> are used for mixed drinks</li> <li>• <i>Dark rums</i> are used for cooking and cocktails</li> <li>• <i>Anejo</i> (also called enejo) is aged rum that is served <b>neat</b> or on the rocks</li> </ul>
<p><b>Scotch</b> (also see Whisky)</p>	<p>Scottish whisky that must be pot stillled in Scotland from water and malted barley using processes defined in the Scotch Whisky Act 1988</p> <ul style="list-style-type: none"> <li>– Must be matured in Scotland oak casks (barrels) at least three years</li> <li>– May not contain any added substance other than water and caramel color</li> <li>– Alcoholic strength must be less than 94.8 percent by volume</li> </ul>	<ul style="list-style-type: none"> <li>• <i>Blended Scotch</i> is a mixture of single malt whiskies and ethanol derived from grain</li> <li>• <i>Single malt</i> Scotch is distilled by a single distillery using malted barley as the only grain ingredient</li> </ul>

Table 3—Liquor Characteristics and Varieties (*continued*)

Liquor	Main Ingredients & Characteristics	Varieties
<p><b>Tequila</b></p>	<p>Made from the heart of the blue agave succulent plant, native to Tequila, Mexico</p> <ul style="list-style-type: none"> <li>– Tequila is required to be 51 percent blue agave, the rest is usually sugarcane or maize</li> <li>– Some tequila is sold with a worm in the bottle, however this is a marketing ploy; the worm is actually a larvae form of a moth that lives on the agave plant</li> <li>– The aging process changes the color of the tequila, as darker yellow colors indicate longer aging</li> </ul> <p>✓ <b>Note:</b> Tequila labeled “gold” is merely silver tequila with gold coloring to resemble aged tequila.</p>	<ul style="list-style-type: none"> <li>• <i>Plata</i> or <i>Blanca</i> (silver or white) is aged no more than a couple months</li> <li>• <i>Oro</i> (gold) is silver tequila with gold coloring</li> <li>• <i>Reposado</i> (rested) has been aged at least a year</li> <li>• <i>Anejo</i> (aged or vintage) has been aged 1-3 years</li> <li>• <i>Azul</i> (blue) is 100 percent blue agave; considered premium tequila</li> </ul>
<p><b>Vodka</b></p>	<p>Distilled from any starch/sugar-rich plant matter</p> <ul style="list-style-type: none"> <li>– Common plants include wheat, rye, potato, molasses</li> <li>– Alcohol content ranges from 35-60 percent by volume</li> <li>– Is clear and odorless</li> <li>– Leading producers include Poland, Russia, and the Ukraine</li> </ul>	<p>Rye vodka is considered to be the premium</p> <ul style="list-style-type: none"> <li>• <i>Clear</i> vodka</li> <li>• <i>Flavored</i> vodka includes red pepper, fruit, cinnamon, ginger, honey, vanilla, and chocolate</li> </ul>
<p><b>Whisky</b> (also see bourbon)</p> <p>✓ <b>Note:</b> Common spelling is “whisky” in Scotland, Canada &amp; Japan; “Whiskey” in the U.S. and Ireland</p>	<p>Distilled from fermented grains of corn, rye, barley, and wheat and aged in oak barrels</p> <ul style="list-style-type: none"> <li>– Spirit obtains its amber color, aroma, and flavor while aging</li> <li>– Usually bottled and sold at 80 proof</li> <li>– <i>Pure pot still whisky</i> from Ireland is made from malted and unmalted barley</li> <li>– <i>Rye</i>, <i>Tennessee</i> and <i>Bourbon</i> whisky are aged in aged in charred oak barrels in the U.S.</li> </ul>	<ul style="list-style-type: none"> <li>• <i>Malt</i> whisky is a spirit where the barley has been allowed to sprout before being toasted over a fire in a kiln; after distillation, is aged 8-15 years</li> <li>• <i>Grain</i> whisky is distilled using a patent still, is left unmalted, and must age a minimum of three years</li> <li>• <i>Blended</i> whiskey comes from a combination of various whiskey barrels</li> </ul>

## Information Sheet

### b. Commonly stocked liqueurs

Liqueur	Main Ingredient(s)
Amaretto liqueur	Almond, Apricot
Anisette liqueur	Black licorice
Benedictine®	Secret recipe of 27 plants and spices
Chambord®	Black raspberries, fruits, herbs, honey
Chartreuse®	130 secret plants, herbs, and flowers
Cherry liqueur	Black cherry, Maraschino cherry
Coffee liqueur	Coffee
Crème de bananas	Banana cream
Crème de cacao	Chocolate and vanilla
Crème de menthe	Spearmint
Frangelico®	Toasted hazelnuts, coffee, vanilla, rhubarb
Galliano®	Vanilla, star anise, 25 herbs and spices
Goldwasser	Orange zest, anise, caraway, and 24k gold flakes floating in the bottle
Goldschlager®	Cinnamon schnapps with 24k gold flakes floating in the bottle
Grand Marnier® (see orange below)	Cognac base and orange peel; Cordon Rouge (higher quality) & Cordon Jaune (lower quality)
Hazel nut liqueur	Hazelnut
Irish cream (see whisky liqueur below)	Cream, eggs, chocolate, Irish whisky
Jagermeister®	Secret mix that includes: cinnamon, bitter oranges, ginger root, red sandalwood, blueberries
Malibu®	Rum with coconut flavoring
Midori®	Japanese melon
Orange liqueur	Orange peel (brands include: Triple Sec, Curacao, Cointreau, Grand Marnier)
Sloe gin	Sweet gin base flavored with sloe berries (blackthorn plums)
Southern Comfort®	Bourbon base with citrus and peach
Tuaca®	Citrus, nuts, milk, vanilla
Whisky liqueur	Whisky based liqueur flavored with various fruits, spices, honey, herbs, etc. (brands include Drambuie, Irish Mist, Irish Cream, and Yukon Jack)

Objective 16

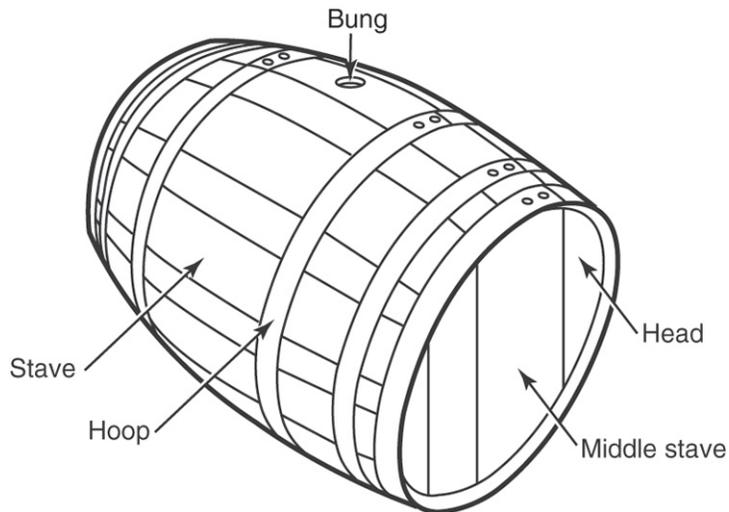
Packaging of alcoholic beverages

a. Bottles

- Best when bottled in brown glass bottles to prevent direct contact with sunlight, which negatively alters flavor
- Other popular bottle colors are green and clear glass
- Retailers are now carrying aluminum bottles
- Bottles are sealed with a crown metal cap, twist-off cap, or cork
- Skunked beer (bottled beer has been in contact with sunlight, causing the hops to develop a “skunky” odor) happens mostly with clear and green bottles, as well as certain imported beers
- Heat pasteurized beer has been heated to kill all yeasts and microorganisms so that it cannot age in the bottle any further
- Bottle conditioned beer (or beer fermented in a bottle) is not pasteurized; it retains the yeasts and microorganisms so the beer can continue to age in the bottle

b. Casks (barrels)

Figure 19—Parts of a Cask



- Wooden, cylinder-shaped container held together by metal hoops
- Wood is usually oak to flavor the beverage
- Used to ferment, store, and age alcoholic beverages

## Information Sheet

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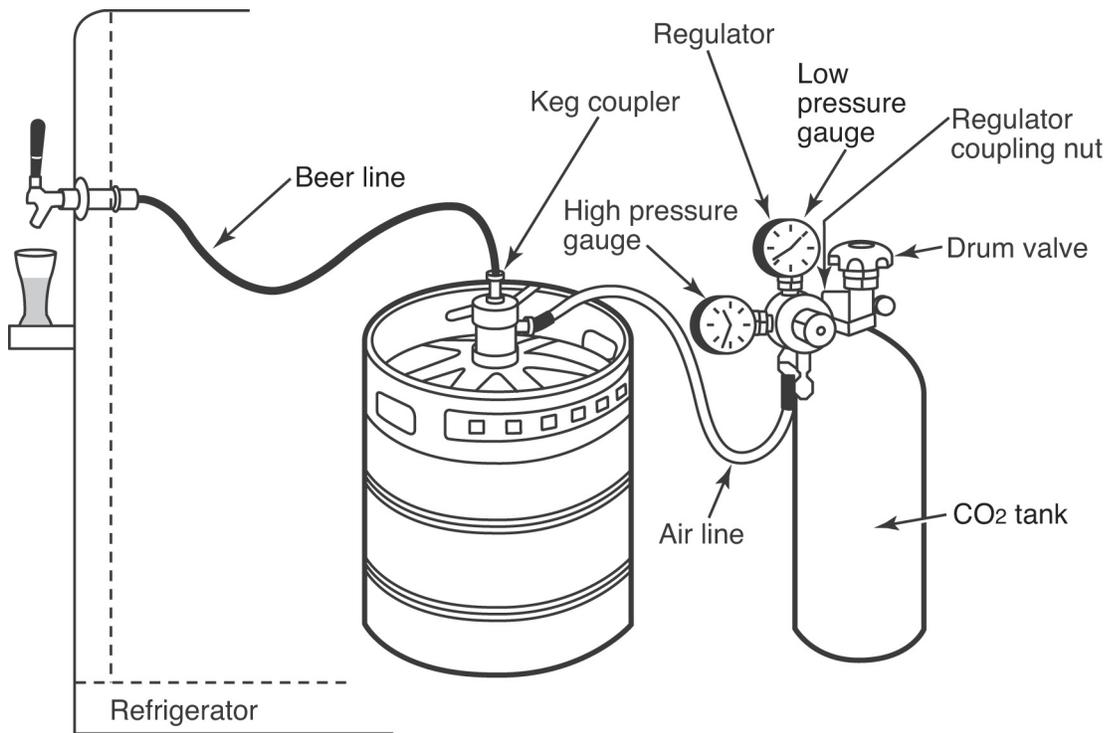
- Beer pulled from a cask is called “draught beer”
- Beer that is unpasteurized, or hasn’t been heat treated, is often stored in a wooden cask so the yeasts can continue to ferment
- Casks come in a variety of sizes, but the standard size holds 36 gallons
- Shives are sealed holes that can be opened to clean out, refill, and control carbon dioxide in the container
- A wooden peg called a spile fits into a shive to control the amount of carbon dioxide created in the cask from yeast fermentation
- Similar to a sink faucet, a keystone (also called a tap or spigot) is a stopper in a cask that seals in the cask contents and also allows the liquid to be drawn or poured at a controlled rate

### c. Kegs

- Metal (usually aluminum), cylinder-shaped container that require a tap for the beverage to be accessible
- Hold alcoholic beverages under pressure so they can retain flavor and carbonation
- Kegs have a single valve on top used to clean, fill, and tap a keg
- A full U.S. standard-sized keg holds 31 gallons; half keg holds 15.5 gallons; pony-keg holds 7.75 gallons
- Beer pulled from a pressurized keg is called “draft beer”

*(Illustration on the next page)*

Figure 20—Keg (Draft Beer)



d. Cans

- Beer sold in aluminum cans allow large producers to mass-market their products
- Aluminum retains cold temperature, keeping the beverage colder longer
- Allow products to go straight from the brewer to the store
- Are pressured to minimize the amount of oxygen that comes in contact with the beverage

Objective 17

**De-alcoholized beverages**

**Key term:**

- **Gravity** – Force that pulls objects downward, towards the earth

a. Alcohol free vs. de-alcoholized beverages

- Alcohol-free beverages contain no detectable alcohol

## Information Sheet

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- De-alcoholized (also called “non-alcoholic”) beverages have had some or all of the alcohol removed from them
  - Contain trace amounts of alcohol
  - Less than 0.5 percent alcohol by volume
  - Certain flavored beverages, such as fruit juice or soft drinks, can contain tiny amounts of alcohol from natural fermentation or use of flavoring extracts
- b. Commonly de-alcoholized beverages
  - Wine
    - Creation is similar to alcoholic wine
      - Grapes ferment
      - Sugar turns into alcohol and carbon dioxide
      - Vineyard uses heat or **gravity** to remove the alcohol and water
      - Syrup is reconstituted using water, grape juice, or grape concentrate
    - A few varieties include brut, chardonnay, merlot, red, Riesling, spumante, white, and white zinfandel
  - Malted beverages
    - Commonly referred to as “near beer”
    - Ingredients are water, grain (usually malted barley or wheat), and hops
    - Can be top fermented (ale) or bottom fermented (lager)
    - After brewing, alcohol is removed by dialysis or reverse osmosis separation
- c. Benefits of de-alcoholized beverage consumption
  - Red de-alcoholized wines also contain the antioxidants called “catechins,” which are said to reduce the risk of heart disease
  - One-third fewer calories allows dieters to enjoy the taste of their favorite beverages without the guilt
  - For religious reasons, some people do not consume alcohol and de-alcoholized beverages are a viable alternative

### Objective 18

#### Beverage glassware

- Pregnant women can consume de-alcoholized beverages, whereas the same “alcoholized” beverage can harm their unborn child with Fetal Alcohol Syndrome (FAS)
- Recovering alcoholics can drink without feeling physical or mental impairment
- Diabetics benefit from the decreased sugar in the beverages
- Party hosts can responsibly serve designated drivers

✓ **Note:** Wine glasses will be covered in Unit 2: Wine.

##### a. Glassware overview

- Comes in a variety of shapes and sizes, each with their own purpose
- By studying drink preparation, the bartender will become aware of which glass is served with a particular beverage

##### b. Shot glass

Figure 21 — Shot Glass



- Used to serve “shots” of liquor that can be overpowering if consumed in large quantities

Examples: Straight tequila or whisky have a strong alcohol content, butter shots liqueur topped with Irish cream has a rich flavor

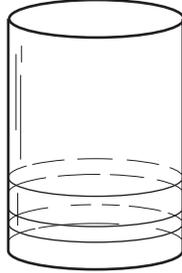
- Sizes
  - Normal shot glass holds 1.5 oz.
  - “Short shot” or “pony shot” holds 1 oz.
- Usually made of glass, but also comes in plastic

## Information Sheet

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c. Highball glass

Figure 22—Highball Glass

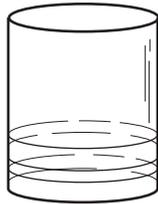


- Usually holds 8-10 oz. or 14-16 oz.
- Taller and thinner cylindrical shape than an old-fashioned glass
- Can be used as a substitute for Collins glasses
- Used to serve mixed drinks with ice

Examples: Gin and tonic, whisky and soda

d. Old-fashioned (lowball or rocks) glass

Figure 23—Old-Fashioned Glass

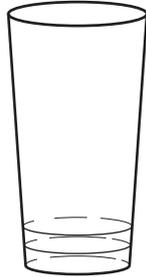


- Holds 8-12 oz.
- Wider and shorter, more “squat” than a highball glass
- Serves liquor or cocktails served on ice or chilled shots containing juice

Examples: Vodka and orange juice, straight whisky on the rocks

e. Collins glass

Figure 24—Collins Glass



- Taller, thinner version of a highball glass
- Usually holds about 12-16 oz.
- Used to serve a variety of drinks, with or without ice

Examples: Collins gin drinks, Bloody Mary, sours, soda, and juice/  
tropical drinks

d. Beer mug

Figure 25—Beer Mug



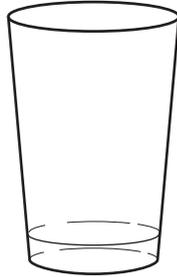
- Standard size holds 16 oz. beer, but is often available in much larger sizes
- Handle on the mug keeps the drinker's hand from warming up the beer or getting too cold
- Commonly kept in the freezer to serve cold, frothy beer
- Mostly used to serve ales, but is used for lagers too

## Information Sheet

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- e. Pint glass

Figure 26—Pint Glass



Pint Glass

- Used to serve draw beer (beer poured from a keg tap); also, often used to serve tea and water
- Holds one pint of beverage

### Objective 19

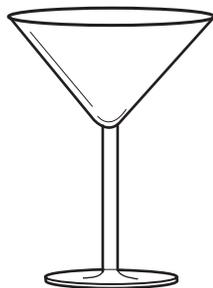
#### **Stemmed glassware**

##### **Key term:**

- **Stemmed**—Narrow part of a glass that connects the stand to the bowl

- a. Martini (cocktail) glass

Figure 27—Martini Glass

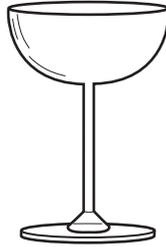


- Has a long, footed stem with an inverted “triangle shape” (small at the bottom with a large, round top)
- Holds 4-12 oz.
- Used to serve cocktails without ice

Examples: Martinis, cosmopolitans, and manhattans

b. Margarita (coupette) glass

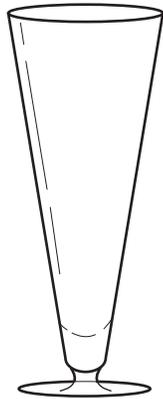
Figure 28—Margarita Glass



- Large round glass perched atop a thick stem and foot
- Rim of glass is broad for garnishing with salt or sugar
- Holds 12 oz.
- Suitable to serve margaritas and fruity “island” drinks, such as a piña colada or daiquiri

c. Pilsner glass

Figure 29—Pilsner Glass



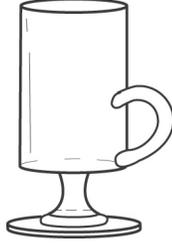
- Traditionally used to serve beer, but can also be used to serve margaritas
- Is a long, thin glass that flutes outward
- Holds 12-14 oz.

## Information Sheet

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- d. Coffee glass (also called “Irish coffee glass”)

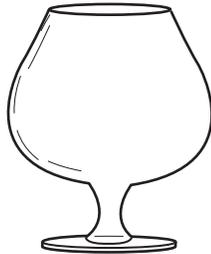
Figure 30—Coffee Glass



- Similar to a pousse glass, but has a handle to prevent burns to the drinker’s hand or fingers
- Holds 8.5 oz.
- Serves almost any hot drink

- e. Brandy snifter

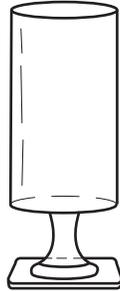
Figure 31—Brandy Snifter



- The shape of the glass allows the hand to warm the brandy at the bottom while the fragrance concentrates at the top
- Curvy “bowl” shape rests on a footed stem
- Used to serve brandy or cognac
- Typically holds 17.5 oz.

f. Pousse glass

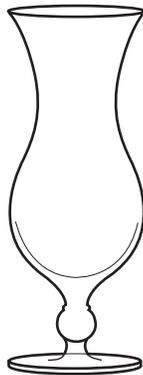
Figure 32—Pousse Glass



- Shaped like an Irish Coffee glass without the handle
- The shape increases the ease of layering beverage ingredients
- Holds 6 oz.
- Used forousse café drinks and other layered dessert drinks

g. Hurricane glass

Figure 33—Hurricane Glass



Hurricane

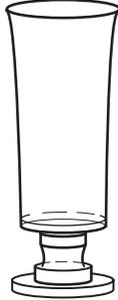
- Tall glass, shaped like a hurricane lamp; has wider circumference around bottom curvy “bulb” shape, smaller circumference around the top, and an outward curving rim good for holding decorative garnishes
- Holds 15 oz.
- Used to serve tropical/fruity drinks

## Information Sheet

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h. Parfait glass

Figure 34—Parfait Glass



- Concave bottom and outward curving rim (often decorative or scalloped)
- Holds 12 oz.
- Used to serve fruit or ice cream drinks

### Objective 20

#### Bar tools

a. Bar spoon

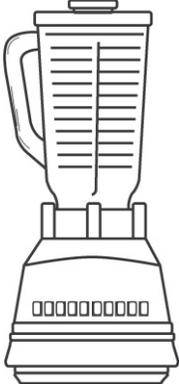
Figure 35—Bar Spoon



- Used to mix cocktail ingredients
- Measuring tool
- Most have a twisted handle

b. Blender

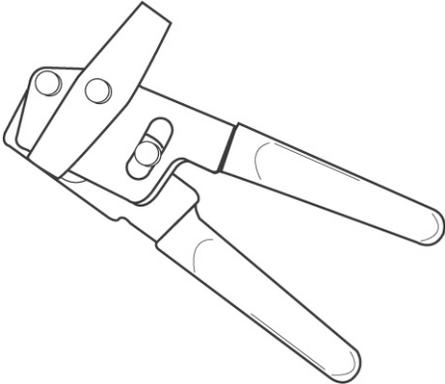
Figure 36—Blender



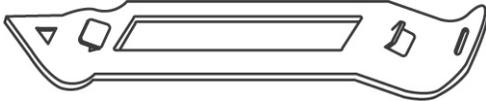
- Mixes cocktails
  - Coladas
  - Frappes
  - Frozen beverages
- Crushes ice
- Variety of styles, sizes, and speeds

c. Can/bottle opener

Figure 37—Can and Bottle Opener



Can Opener

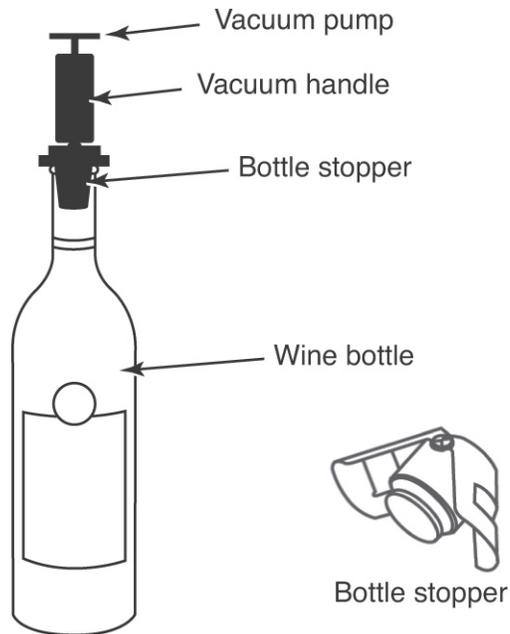


Bottle Opener

## Information Sheet

### d. Champagne/wine vacuum and stopper

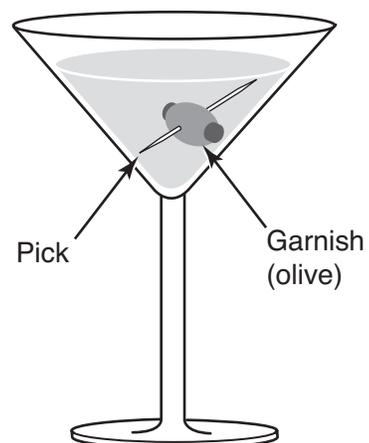
Figure 38—Wine Vacuum and Stopper



- Keeps pressure off the natural effervescence of the wine in the bottle
- Prevents champagne from going “flat”

### e. Cocktail pick

Figure 39—Cocktail Pick

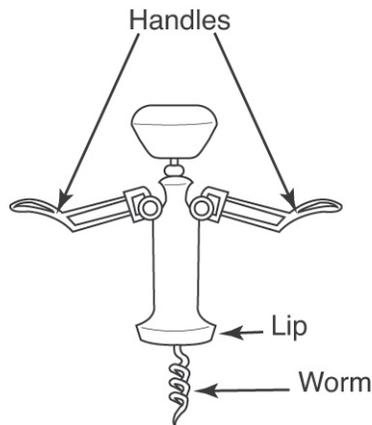


- Small plastic pick, sometimes wooden toothpick used
- Used to spear garnishes

- Prevent garnish from sinking to the bottom of the drink

f. Corkscrew

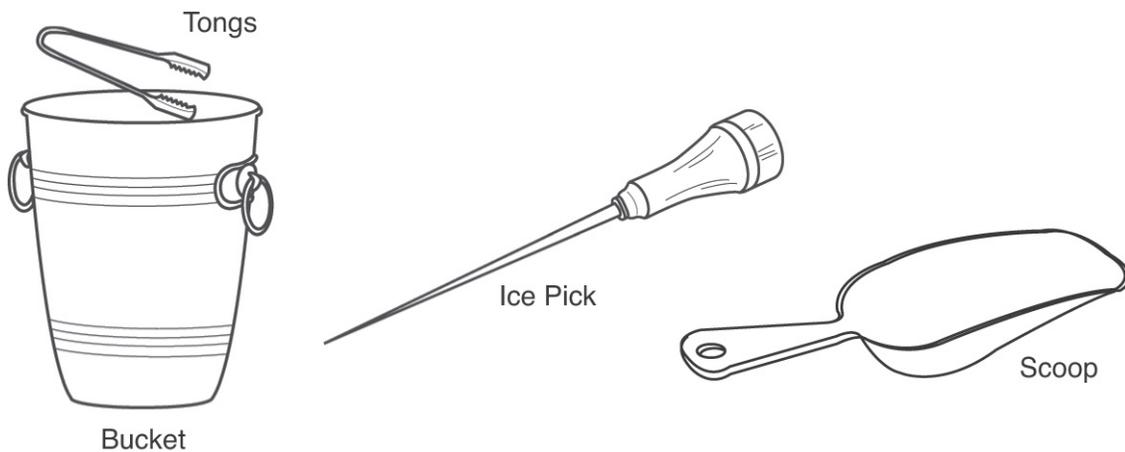
Figure 40—Corkscrew



- Opens corked bottles
- Simple tool to use
  - A spiral-shaped spear (commonly called a “worm”) is screwed inside the center of a wine cork
  - A “lip” is pushed down to catch the edge of the bottle
  - Two handles on the top of the tool are pushed down, which pulls the cork upwards and out of the bottle

g. Ice bucket, pick, tongs, and scoop

Figure 41—Ice Bucket, Pick, Tongs, and Scoop



## Information Sheet

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- Useful for bars that don't have ice storage
- Bucket needs a lid to prevent debris from landing on the clean ice
- Pick breaks up large chunks of ice to fit into cups
- Tongs or scoop needed to remove ice from the bucket

### h. Jigger

Figure 42—Jigger



- Allows for an accurate measure
- Prevents bartender from making a drink overly strong or weak

### i. Juicer/reamer

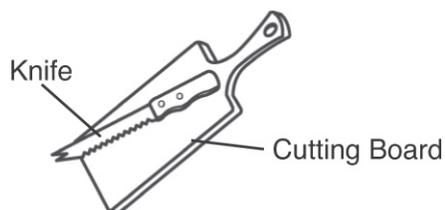
Figure 43—Juicer/Reamer



- Extracts fresh citrus juice from the fruit
- Juice is used in cocktails
- Used by twisting fruit over a cone-shaped grinder

### j. Knife and cutting board

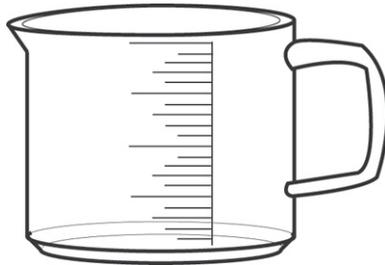
Figure 44—Knife and Cutting Board



- Commonly, a paring knife is used
- Knife is kept in the bar to cut garnishes
- Cutting board is often wood or plastic and has a hole on the handle to hang on the wall

k. Liquid measuring cup

Figure 45—Liquid Measuring Cup



- Plastic often used, but glass is also appropriate
- Allows the bartender to precisely measure liquids, such as milk or juice

l. Mixing glass

Figure 46—Mixing Glass



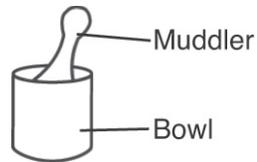
- Used to hold drinks that are being shaken
- Can have a strainer placed on top to strain ice from a cocktail
- Often transparent so the bartender can see the drink has been shaken long enough

## Information Sheet

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m. Muddler and bowl (also called mortar and pestle)

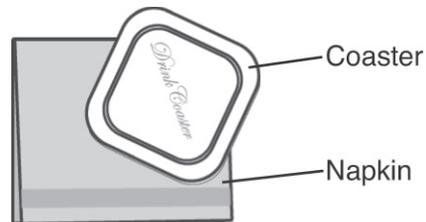
Figure 47—Muddler and Bowl



- Wooden or marble tool
- Usually under 10 inches long
- Used to crush ice, mash citrus fruits, or extract oils/flavors from garnishes

n. Napkins and coasters

Figure 48—Napkin and Coaster



- Soaks up condensation from cold beverages
- Placed under a drink to prevent drips or damage to counters/surfaces

o. Pitcher

Figure 49—Pitcher

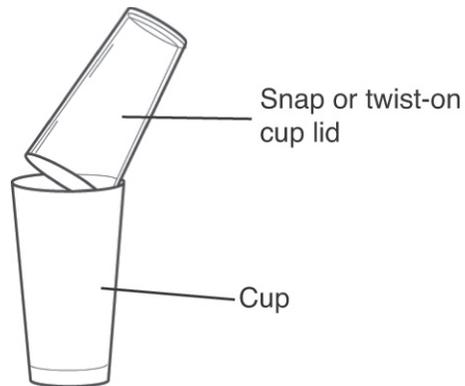


- Often holds iced water or tea
- Metal, plastic, or glass pitcher with a sturdy handle

p. Shaker

- Used for a variety of drinks
  - Sours
  - Manhattans
  - Coladas
  - Martinis
  - Other drinks that don't need extreme mixing in a blender
- Two kinds of shakers
  - Boston shaker

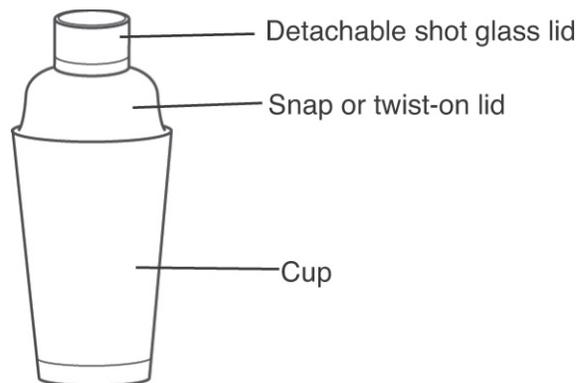
Figure 50a—Boston Shaker



- Stainless steel cup and mixing glass
- Shakes drink from cup to cup without spilling

- Standard shaker

Figure 50b—Standard Shaker



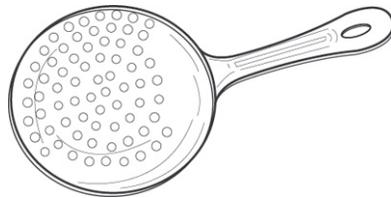
## Information Sheet

- Mixing cup with snap-on lid and detachable shot glass attached to the lid
- Shakes drink in the cup without spilling
- Pours from the shot glass hole on the lid

### q. Strainer

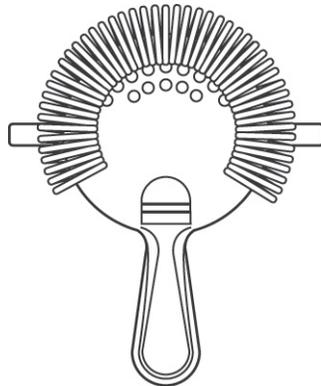
- Dual purposes
  - Keeps ice chunks from remaining in the drink
  - Allows fruit pulp and small ice shards to remain in the beverage
- Julep strainer is similar to a colander; is a round surface with holes punched in it and a handle

Figure 51a—Julep Strainer



- Hawthorne strainer has a spring around the rim, a couple holes on the surface, and a handle

Figure 51b—Hawthorne Strainer



### r. Swizzle sticks

Figure 52—Swizzle Sticks



Objective 21

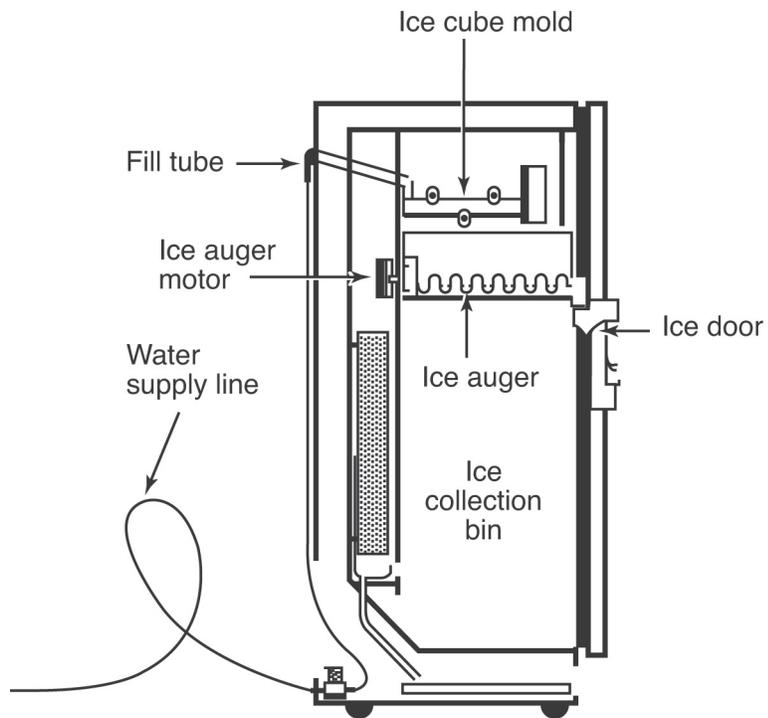
- Glass or plastic stirrers, often have a decorative top end
- Allow the bartender or the drinker to stir their beverage

Drink machines

a. Ice machines

- Useful for providing large quantities of fresh, clean ice
- Comes in cracked or crushed ice varieties
- Ice is used in the restaurant and bar areas to cook, dilute liquids, and cool food and beverages
- Constantly freezes purified water
- Machine components

Figure 53—Ice Machine Components



- Fan plug-in
- Water supply line
- Ice cube mold
- Ice auger and motor blow cold air on cube molds to freeze the water

## Information Sheet

- Ice collection bin
- Ice door to get the product out

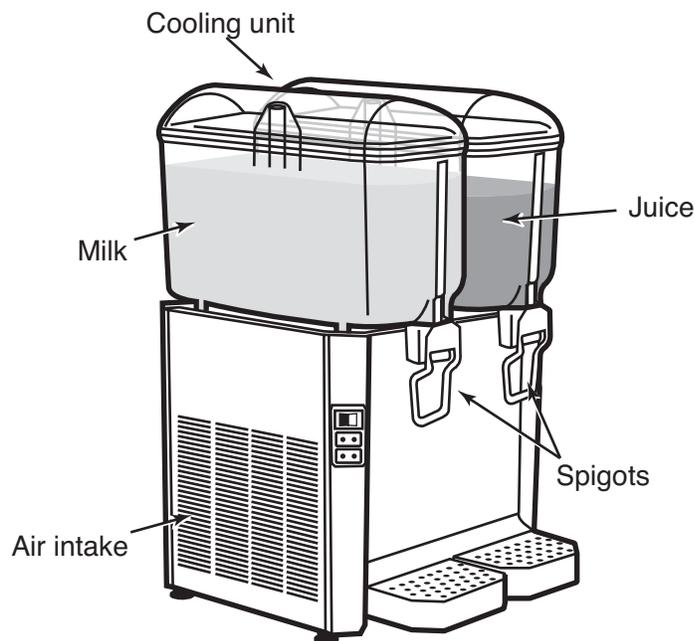
### b. Milk/Juice dispensers

- Keep different juices and milk varieties cold, all in one machine

Examples: Nonfat milk, two percent milk, grape juice, apple juice, orange juice

- Often available where customers can serve themselves
- Must be taken apart and thoroughly cleaned and sanitized daily at closing time
- Machine components

Figure 54—Milk/Juice Dispenser Components



- Large “box” area that holds commercial bags of milk or juice
- Line from the beverages to the spigots
- Spigots to pour out the beverages
- Cooling unit to refrigerate the drinks
- Motor plug-in

- Air intake

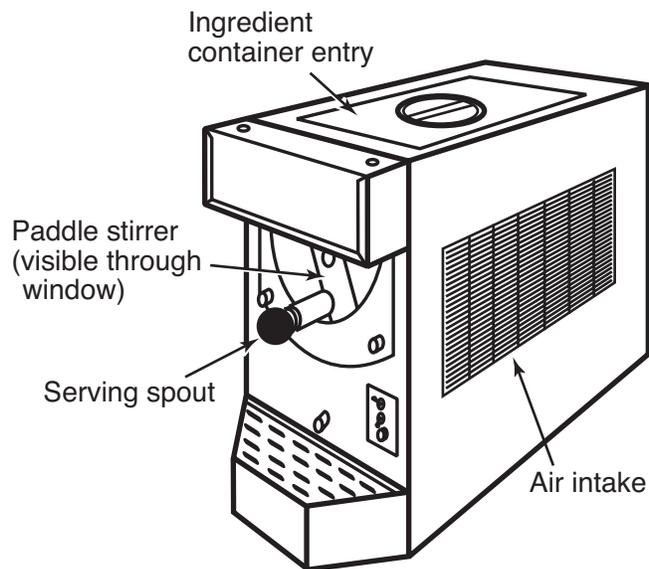
c. Frozen drink/soft serve machines

- Commercially sold, pre-mixed ingredients added to the machine
- Makes different kinds of soft, cold concoctions

Examples: Frozen yogurts, sorbets, ice cream, sherbets, smoothies, and frozen drinks

- Continuously freezes and stirs ingredients so the contents can be served through a spigot
- Must be taken apart and thoroughly cleaned and sanitized daily at closing time
- Machine components

Figure 55—Frozen Drink/Soft Serve Machine Components



- Bowl to hold ingredients
- Paddle that continuously stirs ingredients
- Freezer outside the bowl to keep the contents cold
- Motor to run the freezer and keep the paddle stirring
- Serving spout
- Air in-take

## Information Sheet

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### Objective 22

#### Edible supplies

- a. Condiments
  - Orange flower water/bitters
  - Angostura bitters
  - Vanilla essence
  - Grenadine
  - Tabasco
  - Worcestershire sauce
  - Ketchup
  - Mustard
  - Tabasco sauce
  - Honey
  - Salt
  - Ground black pepper
  - Sugar/sugar substitute packets
  - Celery salt
  - Ground cinnamon
  - Grated nutmeg
  - Cloves
  - Fresh mint leaves
  - Heavy and light cream
- b. Garnishes
  - Olives
  - Marinated pearl onions
  - Maraschino cherries
  - Oranges
  - Lemons
  - Limes
  - Bananas

- Strawberries
- Celery
- Pineapple
- c. Kitchen staples
  - Coffee beans
  - Sugar
  - Eggs
- d. Mixers
  - Milk
  - Half and half
  - Coconut cream
  - Pineapple juice
  - Orange juice
  - Grapefruit juice
  - Cranberry juice
  - Tomato juice
  - Lemon juice
  - Lime juice
  - Lemon-lime flavored soda
  - Cola
  - Tonic water
  - Club soda
- e. Specialty items
  - ✓ **Note:** To flavor drinks, these specialty items are added to the rim of a glass by moistening the rim with water and placing the glass upside down on a “bed” of sugar or salt.
  - Bartenders extra fine sugar
  - Coarse salt

## Information Sheet

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### Objective 23

#### Beverage area opening procedures

- a. Wipe off tables, bar surfaces, chairs, public seating areas, mixing mats, and plastic or leather covered menus with a bleach-water solution
- b. Turn on all needed lights, signs, computers, cash registers, credit card and/or check verification machines, or other electronic devices
- c. Adjust shades so direct sunlight is not shining in customers' eyes (if during the day); close shades if at nighttime
- d. Prepare pot of hot coffee, if needed
- e. Glassware
  - Ensure all glassware is clean and spotless before serving to customers
    - Wash glasses with warm water and a small amount of detergent
    - Rinse with fresh, cold water
    - Allow to air dry
    - Polish with a cloth
    - If water spots are visible, wipe glassware with a soft cloth
  - Any cracked or chipped glassware should be noted, thrown away, and replaced
  - Glassware should be hanging or put in its designated location
- f. Soda machines
  - Clean off the drip tray with a sanitizing solution
    - ✓ **Note:** Ants are often attracted to the sugary soda left in a drip tray.
  - Attach the soda machine spouts, which have been sanitizing overnight in solution
  - Check soda and carbon dioxide tanks to make sure they are full and operable; submit order for refills if needed
  - Check hoses to make sure all are properly attached
  - Soda gun should be hanging on the right-hand side of the station

- Notify management if machines are defective or broken, or if hoses are cracked
- Taste a small amount of each soda to make sure it is flavorful and fizzy, not flat and syrupy
- ✓ **Note:** If soda has an “off” taste, then the syrup or carbon dioxide lines must be increased or decreased as necessary.

g. Ice machine

- Ice should be clean and clear
- If ice is dirty or has an odor, it should be thrown away
- If ice has failed to make in the machine or must be thrown away, bartender should purchase bagged ice
- Ice scoop should be kept outside the ice in a clean container, such as a plastic cup

h. Garnishes

- Clean and cut garnishes
- Put garnishes in trays/containers

i. Supplies

- Trash cans emptied and lined with trash bags
  - Condiments
    - Refilled
    - Cleaned
    - Placed in a central location for bartenders and servers to easily access
  - Straws, napkins, coasters, and swizzle sticks restocked and easily accessible to customers
  - Make sure all needed supplies are clean and readily available
- Examples: Strainers, shakers, mixing spoons, jigger
- Stock menus in a readily accessible location
  - Check spirit supply and restock as needed

## Information Sheet

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### Objective 24

- Prepare drink mixes as needed

Examples: Frozen drink machines, powdered or concentrated drink mixes

#### j. Alcohol

- Restock bottles of spirits from the locked supply closet
- Put pourer in distilled spirits as needed (for pouring accuracy)
- Stock refrigerator or ice coolers with beer, cider, and other cold beverages as required

#### k. Money

- If applicable, put out tip jars
- Make sure cash register drawer is stocked with proper number of bills and coins
- If server/bartender wears an apron, make sure it is stocked with bills and coins to make change as needed
- Check the credit card machine to make sure it is up and running
- Count all money and fill out reports/paperwork as needed

### **Beverage area closing procedures**

#### a. Clean and sanitize all contact areas

Examples: Tables, bar surfaces, chairs, public seating areas, mixing mats, and plastic or leather-covered menus with a bleach-water solution

#### b. Clean and sanitize any used equipment, such as coffee pots or frozen drink machines

#### c. Glassware

- Clean and sanitize all used glassware
- Allow to air dry
- Any cracked or chipped glassware should be noted, thrown away, and replaced

#### d. Soda machines

- Clean off the drip tray with a sanitizing solution

- Wipe off any spilled soda from the machine
- Detach the soda machine spouts and put in sanitizing solution overnight
- e. Ice machine
  - Make sure ice machine hoses are properly connected and ice is being made in the machine for use the next day
  - Make sure ice scoop has been clean and sanitized
- f. Garnishes
  - Throw away garnishes that will turn brown overnight
  - Cover and refrigerate any garnishes that can be reused
- g. Supplies
  - Trash cans emptied, cleaned, and lined with trash bags
  - Condiments
    - Refilled
    - Cleaned
  - Straws, napkins, coasters, and swizzle sticks restocked
  - Clean any supplies used that day  
Examples: Strainers, shakers, mixing spoons, jigger
  - Lock up all alcohol products
- h. Money
  - Count out tips and perform paperwork
  - Count down cash register till and balance with receipts
  - Turn in and lock-up all cash and receipts
  - Balance credit card machine with receipts; take out tips according to company policy
  - Fill out sales reports/paperwork as needed
  - Pick up trash from floor; sweep and mop
  - Close shades

## Information Sheet

### Objective 25

- Turn off lights, signs, computers, cash registers, credit card and/or check verification machines, or other electronic devices
- Lock door or area as required

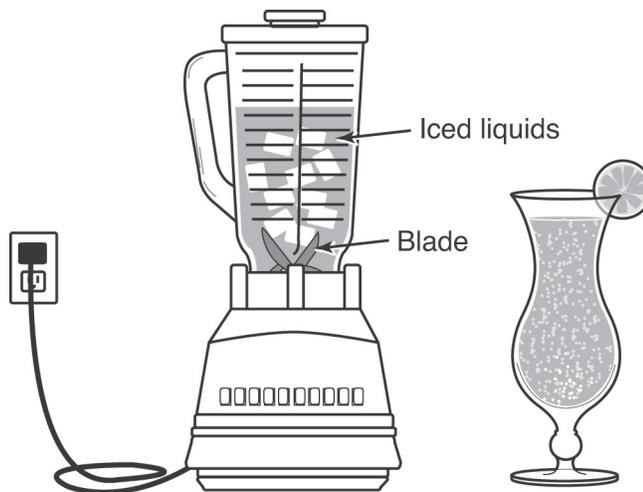
### Beverage preparation practices

#### Key term:

- **Ignited**—Something that is hot or has an open flame

#### a. Blending

Figure 56—Blended Drink

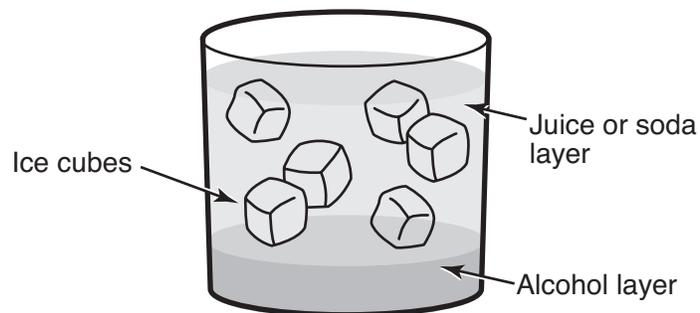


- Prepares frozen drinks or those made with fresh fruits
- Drink blending is simple
  - Ice chunks are placed in an electric blender
  - Frozen drinks made with ice will often have larger chunks of ice settle at the bottom of the blender; the bartender must be sure the large ice chunks are either strained out or crushed before serving
  - Everything but the alcohol is added to the blender; the blended mixture is poured into a serving glass that contains the alcohol and mixed in with a bar mixing spoon
  - If fruit is used to prepare a drink, fruit is washed, peeled (if needed), had the stem and/or seeds removed, and cut into smaller pieces

- When starting a blended drink, fill the blender only 1/4 full of ice
- Start the blender on low speed to let the ingredients mix thoroughly, then switch to higher speed until finished to crush the ice thoroughly
- Ingredients are placed in an electric mixer and blended until smooth, with no visible chunks of fruit or ice
- When blending, be sure to hold the lid on the top of the blender to prevent splatter
- Unplug a blender before inserting a spatula or tool into the mixture to avoid accidents

### b. Building

Figure 57—Built Drink

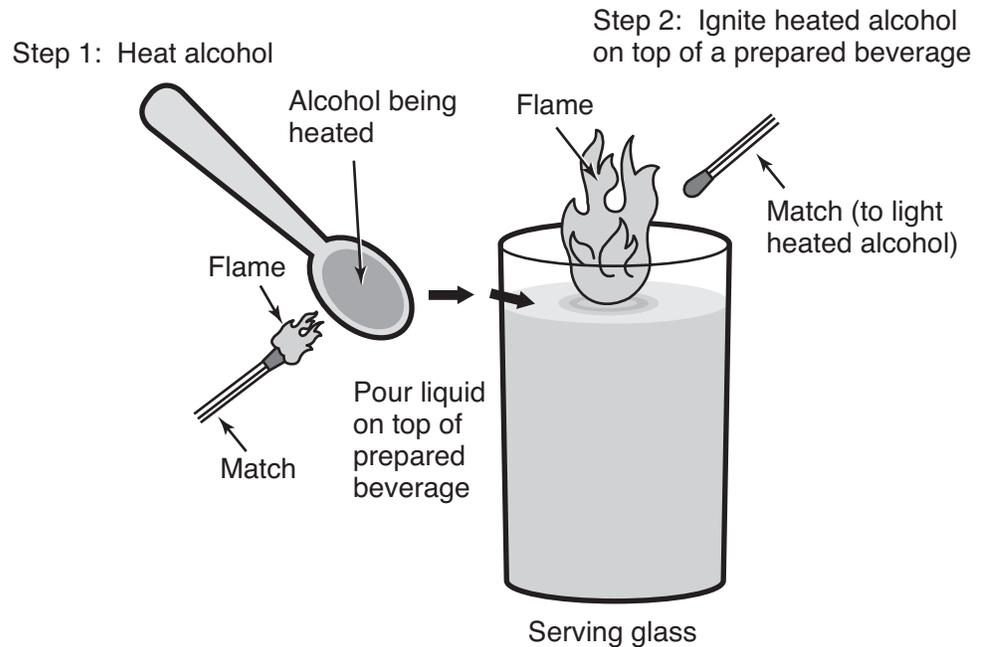


- Easiest and most common method of beverage creation
- Used on cocktails that contain non-citrus juices or carbonated beverages
- Involves pouring the ingredients directly into the glass it will be served in
- Ingredients are usually “floated” on top of each other with about 1/2” of empty space left between the drink and the glass to stir without spilling
- A swizzle stick can also be added to the drink so the consumer can evenly combine ingredients

## Information Sheet

### c. Flaming

Figure 58—Flamed Drink

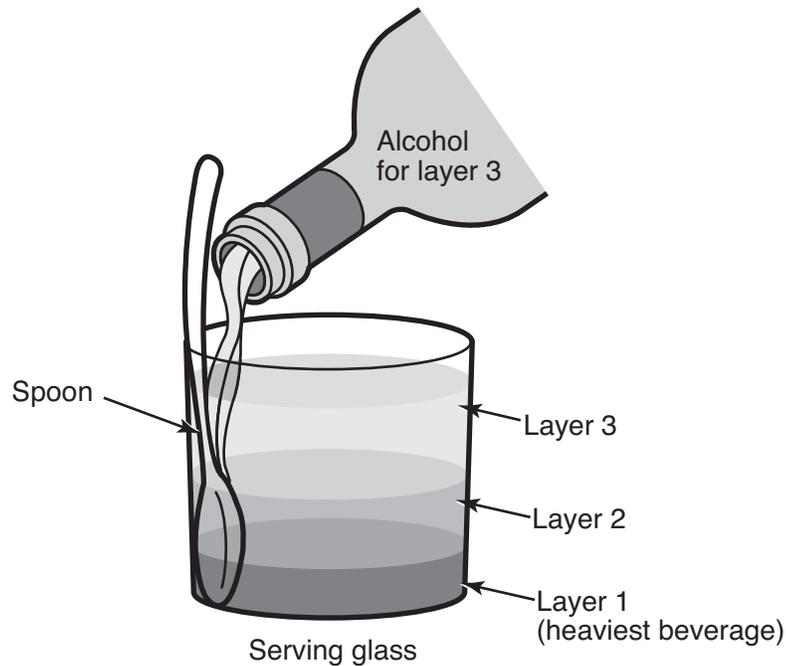


- Involves adding flavor to a beverage by setting the top of the drink on fire
- Prepare the drink as instructed in the proper serving glass
  - Heat a small amount of alcohol on a spoon
  - Pour the heated alcohol onto the top of the prepared beverage
  - Light the heated alcohol on top of the drink
- Safety tips
  - Always extinguish a flame before consumption
  - Never add alcohol to **ignited** drinks
  - Light the drinks in a location where they cannot harm guests or other employees
  - Keep other objects from coming in contact with the flame
  - Never leave ignited drinks unattended

- Before preparing flaming drinks, make sure proper fire safety equipment and procedures are in place

### d. Layering

Figure 59—Layered Drink



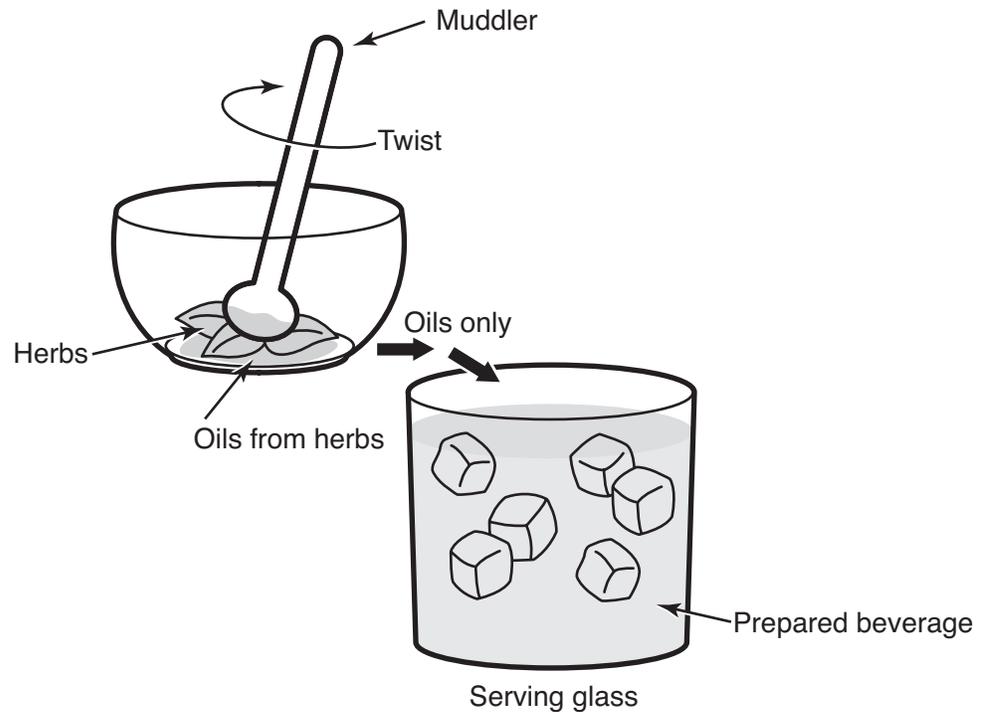
- Place spoon upside-down (with the round edge upward) in glass the drink will be prepared in
- Allow the spoon's upside-down end to rest against the edge of the glass
- Pour heaviest ingredient along the spoon and down the edge of the glass; it will collect at the bottom in the first "layer"
- Pour consecutively lighter ingredients along the spoon; they will collect on top of previous layers as the next layer
- Lighter weight ingredients are layered on top of heavier ingredients, as the heavier ingredient can sink down through a lighter weight ingredient

Example: Bass Ale (lighter weight) is layered on top of Guinness lager (heavy weight) to create a "Black and Tan" beer (also called a "Half and Half")

## Information Sheet

### e. Muddling

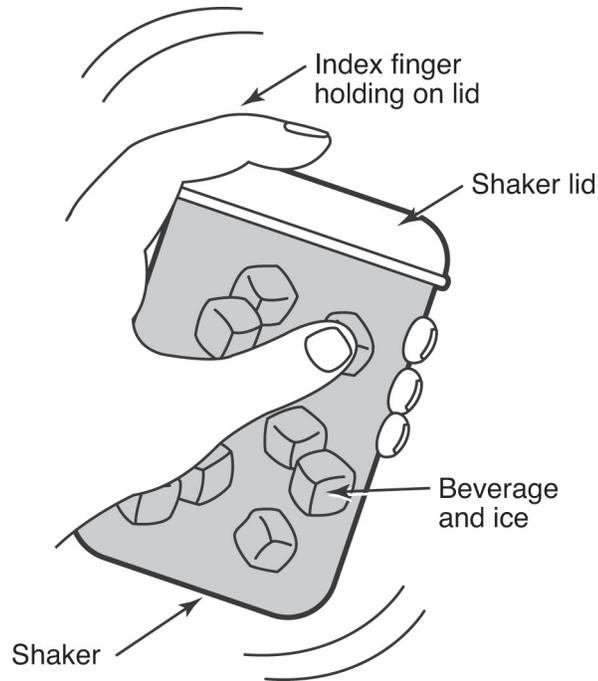
Figure 60—Muddled Drink



- Extracts flavorful oils or juices from fruit or herbs by crushing them
  - Is relatively quick and simple
    - Place the item being muddled into a solid bowl, such as a mortar, or a drinking glass
    - Take the muddler (or pestle) and crush the item until the proper amount of oil or juice is extracted into the bowl
    - Usually, syrup de gomme (simple syrup, a thick mixture of dissolved sugar and water) is added to herbs to sweeten the concoction
    - Take out the mixture and add to the beverage
- ✓ **Note:** Most drinks will require you to double check that there are no seeds or leaf/fruit particles left in the oil or juice before adding to the beverage, or the drinker will end up with the particles on their tongue.

f. Shaking

Figure 61—Shaken Drink

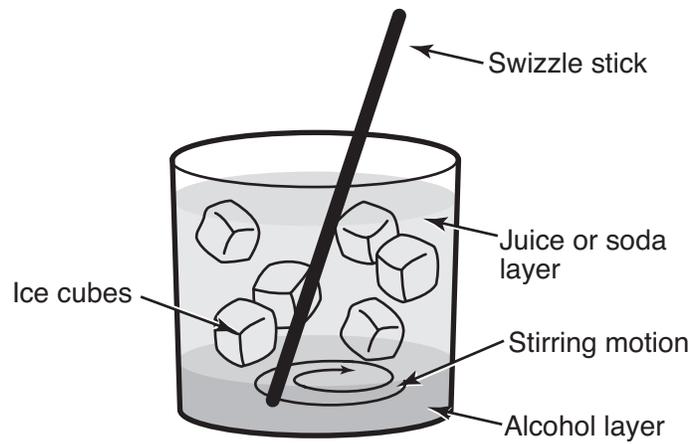


- Used on drinks made with cream, eggs, or fruit juices
- Is a very common bar practice
  - Fill shaker  $\frac{3}{4}$  full of ice chunks (not crushed ice, unless specified)
  - Add liquids
  - Put top on shaker
  - Shake mixture until condensation forms on the shaker top
  - Strain or pour into proper glass and garnish

## Information Sheet

### g. Stirring

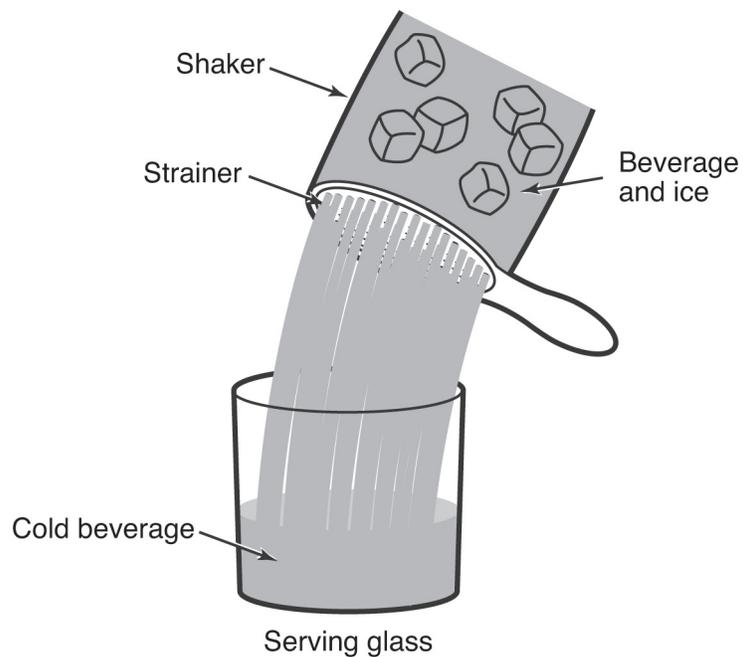
Figure 62—Stirred Drink



- Thoroughly mixes ingredients together and distributes alcohol evenly throughout the beverage
- Drinks are usually mixed in a mixing glass
- Most stirrers are made of a metal or glass rod
- After stirring, strain or pour contents into a serving glass

### h. Straining

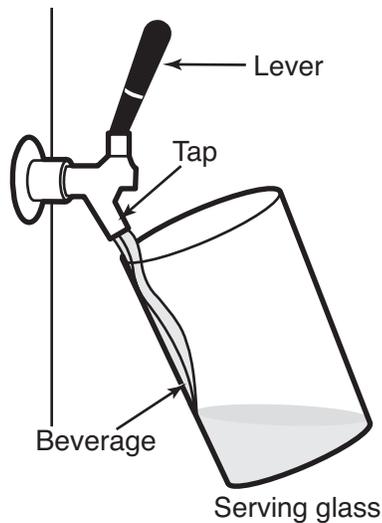
Figure 63—Strained Drink



- Used on beverages that should be served cold, but not on ice
- After a beverage is shaken, a Hawthorn or Julep strainer is placed on the top of the cup
- The strainer is held on with one hand, while the other hand firmly grasps the shaker cup to tip it over a serving glass
- The drink pours through the strainer and into a serving glass, where it can be garnished and served

i. Tilt pouring

Figure 64—Tilt Poured Drink



- Most often used on soft drinks and beers
- Carbonated drinks should be slowly poured down the edge of a glass tilted slightly to prevent foamy “head” from forming
- The bartender should fill the glass 3/4 of the way, wait for any head to dissolve, then fill the remainder from the tap

### Objective 26

#### Beverage presentation protocol

a. Cocktails and blender drinks

- Consist of an alcohol base, flavoring (soda, drink mix, fruit juice, cream), and coloring enhancement (herb, fruit, grenadine, blue Curacao)

Example: A mint julep cocktail can consist of a bourbon base, soft drink flavoring, and mint leaf enhancement

## Information Sheet

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- Common garnishes: cherries, lemons, limes, oranges

✓ **Note:** While garnishes vary with drinks, some drinks will always have the same one (unless specified). For example, a standard martini is served with an olive garnish.

b. Beer

- Usually, a single beer is served “pure” in a glass; however, two different beers can be mixed for a special drink

Example: Guinness lager layered beneath Bass ale creates a “Black and Tan”

- Can be drawn from a keg tap (i.e. “draw beer”) to serve in a pint glass or frosted mug, or is served in a bottle or can
- Often served in a frozen beer mug or pint glass
- If served in a bottle, the bartender takes the crown cap off the bottle for the guest and offers to serve in a frozen mug or pint glass; often inserts a lemon or lime wedge into the bottle for flavor
- If served in a can, the bartender will open the can and offer to serve in a frozen mug or pint glass

c. Tropical drinks (sometimes called “boat drinks”)

- Frozen kinds made in an electric blender
- Often the same color as the fruit from which they are made
- Garnished with tropical fruit, such as pineapple or orange
- To market them, bars will serve them with promotional items

Examples: Small paper umbrellas, Mardi gras beads, swizzle sticks with seasonal glass decorations on top

- Often made with liquors common to tropical regions, such as rum or tequila

d. Hot beverages

- Offered during the appropriate course
- Should be served hot enough that steam is rising from the drink
- Presented in a mug or glass with a handle

- Often garnished with a dollop of whipped cream and/or cocoa powder
- Be sure to wipe spills off the glassware before serving
- When serving, be sure to set down on the table in front of the customer instead of handing them a hot glass
- Hot beverages should be placed on a coaster, as hot glassware will heat up the bar, table, or other serving area

e. Non-alcoholic beverages

- Serve drinks in bar glassware so non-alcohol drinkers don't feel left out
- Don't forget to add garnishments to non-alcoholic beverages
- Mix food and non-alcoholic beverage combinations to entice diners' taste buds
  - Rich, fatty foods are served with somewhat acidic drinks to "cut" the flavor
  - Foods with strong flavors should be served with heavier drinks, like dark tea or red fruit juice
  - Sweet foods should be served with an equally sweet beverage
  - Creamy beverages will prolong the taste of a food/beverage combination on the palate

### Objective 27

#### Beverage service tips

- a. All ice should be scooped into the glass with an ice scoop or tongs
- Never use the cup or fingers to scoop ice
  - ✓ **Note:** A single plastic cup can be used to scoop ice. Never use a glass as an ice scoop; if the glass breaks in the ice, all of the ice must be discarded and the machine thoroughly cleaned.
  - The ice scoop or tongs should never be left in the ice
- b. To avoid extra trips between the bar and customer, all drinks should be garnished and all accompanying materials (such as coasters, napkins, spoons, or condiments) should be put evenly on a tray before table service

## Information Sheet

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- c. To prevent drips, the waitperson or bartender should take a clean paper towel and wipe any spilled beverage from the outside of the glass before delivery
  - ✓ **Note:** It is imperative the bar or wait staff uses a clean and sanitized towel or disposable paper towel and not a wet cleaning rag from the sink - as this can spread germs.
- d. A customer usually is given the choice to pay per drink or start a “tab,” where he or she can pay after consuming all desired beverages
  - Beverage payment policies vary with each individual establishment
  - A credit card or check is usually taken from the customer choosing to start a tab
  - If paying per drink, the wait person should deliver the ticket and get the money before serving
- e. Server must be careful to avoid touching contact surfaces, such as glass rims where the drinker’s lips will touch
- f. When serving, it’s best if the bartender remembers which guest ordered a particular drink and then says the drink name/specifications as he or she sets it down in front of the drinker
  - ✓ **Note:** If the drink order is incorrect, this gives the guest the chance to notice before consuming the beverage
- g. Hot beverages should be served in a container that will not burn the drinker’s hand

Example: A coffee mug has a handle the drinker can grasp without their fingers getting hot.
- h. Cold beverages should be served with extra napkins, as the watery condensation can make a mess
- i. Bar drinks are usually served on a coaster to absorb condensation and prevent water “ring” damage to the wooden tables and/or bar

### Objective 28

#### Drink selection process

✓ **Note:** Wine selection will be included in *Unit 2: Wine*.

- a. Paired with cheese
  - Tastes best with a slightly bitter beverage
  - Hoppy, Belgian beer serves well

- b. With a course
  - Appetizers or tapas
    - Hoppy, dry beer with some bitterness
    - Fruity, blender drinks
    - Whisky-based cocktail
    - Martini
  - Dessert
    - Pairs with a sweet or fruity drink
    - White or wheat beer
    - Cordials
    - Hot drinks
    - Examples: Cappuccino and Kahlua, hot buttered rum, coffee with Irish whisky
    - Mint-flavored beverages
    - Sweet distilled liquor
- c. Fish flavor is sharpened with a dry beverage
  - Dry, pilsner beer
  - Vodka cocktail
- d. Poultry and pork taste best with malty, sweet flavored drinks
  - Malt lager
  - Hard apple cider
- e. Red meat is commonly served with fruity, heavier beverages
  - Fruity ale
  - Heavy, brown ale
  - Whiskey-based cocktail
- f. Shellfish flavor can be sharpened with a dry beverage

## Information Sheet

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- Dry lager
  - Stout lager
  - Porter lager
  - Vodka-based cocktail
- g. Smoked meats taste best with a rich, smoky beverage
- Smoked Rauschbier
  - Porter lager
  - Hybrid beer mixes
  - Wood aged distilled liquors
    - Bourbon
    - Sipping whiskey
- h. Wild game traditionally served with a drink that's been aged in wooden casks
- Heavy, Scottish ale
  - Whiskey with soda or ginger ale
- g. Regional food-alcohol pairings
- ✓ **Note:** These food-drink combinations are stereotypical. Consumers are encouraged to experiment with food-drink combinations.
- American foods served with micro brewed ales, wine, or cocktails
  - Asian food served with hot sake or cold beer
  - European food usually served with wine or regional beers
  - German foods served with all kinds of German beers or Jagermeister
  - Hawaiian/tropical foods served with hoppy, malty beers (ale or lager) or fruity blender drinks (such as a piña colada)
  - Italian food served with a complementary Italian wine
  - Mexican food served with Mexican-made ales, tequila-based drinks (such as a tequila sunrise or margarita), and fruity blender drinks

Objective 29

Alcohol in food preparation

Key term:

- **Flammability**— Ability to catch on fire

- a. Instead of consuming an alcoholic beverage with food, the alcohol is cooked into the food
  - Most of the alcohol evaporates from the heat involved in cooking
  - After the alcohol has evaporated, the flavor of the spirit remains with the food
- b. The **flammability** of alcohol in preparing foods can provide a stimulating visual presentation
  - Dishes prepared via “flambé” involve pouring alcohol on top of a prepared dish of food and then setting it on fire
  - Some Japanese “hibachi” style restaurants will pour a clear alcohol, such as vodka, on the grill and set it on fire
- c. Uses of alcohol in food
  - Sauces
    - Example: Tequila lime sauce drizzled on bread pudding
  - Marinades (often overnight in the refrigerator)
    - Example: Salmon marinated overnight in a bourbon and brown sugar mixture
  - Main course flavoring
    - Example: Adding beer instead of water to cooking chili
- d. Non-alcoholic substitutions can be used to replace the alcohol used in preparing some dishes
  - For religious or personal purposes, some people do not drink alcohol
  - Some restaurants will substitute the alcoholic beverage with a non-alcoholic substitution when they run out of a particular spirit
  - Alcohol is typically expensive, so some restaurants choose to use a substitution to cut costs

## Information Sheet

- For all these reasons, cooks need to know some non-alcoholic substitutions

Table 5: Non-Alcoholic Substitutions

<b>Alcoholic Beverage</b>	<b>Non-Alcoholic Substitution</b>
Light-colored beer/ales	Chicken or mushroom broth, ginger ale, white grape juice, non-alcoholic beer
Dark-colored beer/lagers	Strong chicken or beef broth, non-alcoholic beer
Brandy, scotch, or bourbon	Use corresponding fruit juice (usually peach, apricot, apple, or pear juice)
Amaretto	Almond extract
Brandy	Apple cider/juice, white grape juice, diluted peach or apricot syrup
Crème de menthe	Spearmint/mint oil mixed with water or grapefruit juice
Champagne	Sparkling white grape juice, sparkling cranberry juice, ginger ale
Cognac	Peach, apricot or pear juice
Cointreau	Orange juice or frozen orange juice concentrate
Hard cider	Apple juice or cider
Coffee liquor (such as Kahlua)	Espresso or coffee moistened with water and mixed with a touch of cocoa powder
Kirsch	Cherry, raspberry, boysenberry, or currant juice/syrup or cider
Orange flavored liquor (such as Grand Marnier)	Orange juice or frozen orange juice concentrate
Rum	Light rum: Pineapple juice flavored with almond extract; Dark rum: Rum extract flavoring, molasses thinned with pineapple juice and almond extract
Sake	Rice vinegar
Schnapps	Corresponding flavor extract or syrup, such as peach or mint

Table 5: Non-Alcoholic Substitutions (*continued*)

Alcoholic Beverage	Non-Alcoholic Substitution
Sherry or bourbon	Orange or pineapple juice, peach syrup, or vanilla extract
Southern Comfort	Peach nectar mixed with a small amount of cider vinegar
Tequila	Cactus juice or nectar
Vermouth (sweet or dry)	Sweet: White grape juice or white wine vinegar Dry: Apple or grape juice, balsamic vinegar, water with lemon juice
Vodka	White grape or apple cider combined with lime juice



**Unit Contents**

**Student Edition  
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**Student Worksheets**

\* Assignment Sheets

1—Match Grape Names by Color . . . . .	SW 2-1
2—Match the Wine with Its Flavor Sensations . . . . .	SW 2-3
3—Pair Wine with Food . . . . .	SW 2-5
4—Match the Cooking Style with the Technique Described.	SW 2-7

\* Job Sheets

1—Uncork a Bottle of Wine . . . . .	SW 2-9
2—Use a Tray to Serve a Glass of Wine. . . . .	SW 2-11
3—Open and Serve Sparkling Wine . . . . .	SW 2-15

\* Student Supplement

1—Participate in a Wine Tasting Event . . . . .	SW 2-19
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\* Student Worksheets are located in the back of the Student Edition.



**Objective Sheet****Unit Objective**

After completing this unit, the student should be able to discuss the basics of wine history, selection, and presentation. The student should also demonstrate these competencies by completing the assignment sheets and job sheets, and by scoring a minimum of 85 percent on the written test.

**Specific Objectives**

After completing this unit, the student should be able to:

1. Match terms related to wine with their definitions.
2. Complete statements regarding the history of winemaking.
3. Select true statements regarding basic winemaking ingredients.
4. Complete statements regarding the winemaking process.
5. Select true statements regarding sparkling wines.
6. Complete statements regarding fortified wines.
7. Match the wine growing and producing region with its country.
8. Identify parts of a wine label.
9. Identify wine glassware.
10. Identify wine bar tools.
11. Select true statements regarding storing wine.
12. Complete statements regarding wine serving temperatures.
13. Complete statements regarding cork removal.
14. Select true statements regarding wine service.
15. Select the best statements regarding wine pouring.
16. Complete statements regarding wine tasting and the senses.
17. Complete statements regarding common wine flavor sensations.
18. Match the wine faults and curiosities with their descriptions.
19. Select true statements regarding pairing wine with food.
20. Select true statements regarding cooking with wine.

## Objective Sheet

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21. Match grape names by color. (Assignment Sheet 1)
22. Match the wine with its flavor sensations. (Assignment Sheet 2)
23. Pair wine with food. (Assignment Sheet 3)
24. Match the cooking style with the technique described. (Assignment Sheet 4)
25. Uncork a bottle of wine. (Job Sheet 1)
26. Use a tray to serve a glass of wine. (Job Sheet 2)
27. Open and serve sparkling wine. (Job Sheet 3)

### **Student Supplement**

Participate in a wine tasting event. (Student Supplement 1)

## Information Sheet

### Objective 1

#### Terms and definitions

✓ **Note:** Please refer to “Key terms” for definitions.

- |                       |             |            |
|-----------------------|-------------|------------|
| • Aperitif            | • Dosage    | • Sulfites |
| • Aphids              | • Dry       | • Surname  |
| • Bouquet             | • Estate    | • Sweet    |
| • Carbon dioxide      | • Fortified | • Tannins  |
| • Charred             | • Harvest   | • Variety  |
| • Clarifier           | • Must      | • Volume   |
| • Crop                | • Neutral   | • Yeast    |
| • Cross-contaminating | • Palate    |            |
| • Decanter            | • Riddle    |            |
| • Disgorging          | • Rim       |            |

### Objective 2

#### History of winemaking

##### Key terms:

- **Aphids**—Insects that transfer viruses to plants and suck out sap
- **Harvest**—Season when crops are ripe and ready to be gathered

- a. It is believed that wine was being made from grapes as early back as 6000 B.C. in Mesopotamia (modern-day Iraq)
- b. Dated from 3000 B.C., hieroglyphics (crude drawings) of winemaking and drinking were found in the pyramid tombs of Egyptian pharaohs (kings)
  - Primarily made for religious purposes
  - Stored in clay jars

✓ **Note:** Wine is still made in the Nile Delta area today
- c. A wine stone press dated to 1600 B.C. was found at a villa in Crete, Greece
  - Wine consumption is associated with the Greek god Dionysos
  - Grape vines were transported to other countries along the Mediterranean and Black Sea areas, including Spain, France, Italy, and Georgia

## Information Sheet

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- d. The Roman Empire (31 B.C. to 14 A.D.) created a lasting foundation for fine Italian wines
  - Exported wine and vines to European countries, such as France and Germany
  - The Romans researched and experimented to find the best grape and soil varieties
  - Introduced wooden barrels and glass bottles to the wine trade
- e. During the Dark Ages (476 to 1000 A.D.) in Europe, monasteries continued to grow grapes and make wine for religious ceremonies – even when it was prohibited to the layperson
  - Wine was exported heavily to Europe due to lack of clean drinking water in large cities like London, England
  - Flavors were often very sweet or strong to cover up the taste of polluted water
- f. Water purification methods became more reliable in Europe during the 17th Century, so wine drinkers focused on varying flavors instead of strength or sweetness
- g. In the 17th century, glass-making was refined and corks were invented, spurring along the industry
- h. Wine was romanticized by the poets and artists during the Enlightenment period (18th Century)
- i. With each following war or disagreement between countries during the 17th through 19th centuries, the demand for wine flavors changed according to region from which it could acceptably be imported
  - The English had political feuds with France and imported from Portugal, Holland, and South Africa (instead of drinking French wine)
  - Bourdeaux, France traded their wine for coffee from the Americas, which created a huge demand for French wine at seaports along the way
  - British turned to Portugal instead of France for wine during the Napoleonic War, making Port popular in England
- j. Nineteenth century developments impacted future wineries
  - Champagne was introduced by Nicole-Barbe Clicquot-Ponsardin in an assembly line form

### Objective 3

- Thomas Jefferson encouraged winemaking in America
  - Ohio began to grow grapes, but California grapes took over in popularity
  - France's vineyards became infected with **aphids**, so French winemakers moved to Spain and taught Spaniards how to make wine
- k. Modern inventions have brought winemaking to where it is today
- Refrigeration allows winemakers to control fermentation temperature in hot climates
  - Machines became more efficient, allowing grape harvesters to work night and day to control grape temperature during **harvest**
  - Ease of making and controllability is spurring along the creation of lower quality wines worldwide

### Basic winemaking ingredients

#### Key terms:

- **Charred**—Something that has been blackened by fire
- **Clarifier**—Substance that makes a liquid clear
- **Tannins**—Chemical found in grapes that gives wine a woody flavor
- **Yeast**—Simple fungus found in nature that ferments sugars

- a. Any kind of fruit can be used, but grapes are the most common
- Beverage would not ferment without the fruit
  - Grape skins, seeds, and stems contain **tannins**, which can give wine its woody flavor
- b. Fruit juice
- Wine is, at its base, fermented fruit juice
  - Juice is pressed from the fruit and strained
- c. **Yeast**, which comes in different strains
- The type of yeast strain determines the flavors of the wine, whether it be sweet, fruity, or dry

## Information Sheet

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- Yeast strains are common, as there are yeast strains floating in the air we breathe

✓ **Note:** If you left a cup of grape juice out and uncovered for a week, you would produce a primitive and bad tasting wine thanks to airborne yeasts.

d. **Clarifier** eliminates cloudiness

- Bentonite
- Casein
- Egg white
- Gelatin
- Various enzymes

e. Spirit, such as Brandy, for making fortified wine

f. Sugar, if making sparkling wine

g. Flavorings

- Herbs
- Spices
- Fruit peels
- Roots

h. Wood barrels/casks

- Wood contains tannins that can add flavor to the wine during aging
- Oak is commonly used, but other tree varieties are used as well
- Wood is sometimes **charred** to add a smoky flavor to the wine

Objective 4

Winemaking process

**Key terms:**

- **Carbon dioxide**—Colorless, odorless gas that is produced by the release of oxygen
- **Must**—Moldy layer that develops atop wine prior to and during fermentation

Figure 1—Basic Winemaking Process

Fruit Harvested & Crushed	Yeast, Grapes & Juice Blended	Mixture is Fermented	Strained & Pressed	Skins, Seeds, & Stems Removed	Clarified, Aged, & Bottled
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- a. A winemaker or wine merchant is often referred to as a vintner
- b. Grapes are harvested and crushed, usually by machine
  - ✓ **Note:** Before machinery, winemakers would stomp on grapes with their bare feet. This method was proven to be unsanitary, which adversely affected the flavor of the wine.
- c. Yeast, grapes, and grape juice are blended and the mixture sits at a controlled temperature in a giant vat
  - If the stems, seeds, and skins are allowed to stay in the mixture, constantly being stirred back in, the wine will be red
    - As it sits, the skins and seeds tend to rise to the top, forming a layer called “**must**”
    - The layer of must is constantly stirred back into the mixture, along with the yeast that is needed for fermentation
  - If the juice is filtered out from the stems, seeds, and skins during the sitting, the wine will be white
- d. Mixture begins to ferment
  - Yeast spores reproduce massively until all the sugar in the grape juice has been eaten by the yeast
  - The process turns the sugar into alcohol and **carbon dioxide**
  - Once all the sugar has been eaten by the yeast, the yeast settles to the bottom of the container
  - In one to two weeks, fermentation has ceased and the juice is ready to transfer to another vat

## Information Sheet

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- e. Liquid is strained into the new vat and then the remaining stems, seeds, and skins are “pressed” to extract more liquid and remaining flavors
- f. After the strained and pressed liquid has entered the new vat, all skins, seeds, and stems are removed (if a red wine)
- g. Wine is ready for clarification
- h. After clarification, the liquid is carefully removed without stirring up the settled sediment and transferred to oak casks or barrels
  - ✓ **Note:** The yeast is left as waste.
- i. After aging the proper amount of time in the wooden barrels, wine is bottled and corked for selling
  - Wines are often blended with other batches and varieties of wine for flavoring purposes
  - Wine bottles are tall with a tapered neck, giving any sediment a place to settle in during aging
  - Wine bottles are sealed with either a cork or a screw cap
    - ✓ **Note:** Traditionally, wine bottles are sealed with a cork. However, it is becoming more accepted to use a screw cap to seal a wine bottle.

### Objective 5

#### Sparkling wines

##### Key terms:

- **Disgorging**—Process of liquids or gasses gushing out of a container in a stream
- **Dosage**—Extra ingredient(s) added to a substance
- **Riddle**—Process of yeast settling in the neck of the bottle so it can be removed

- a. Only sparkling wines made in the Champagne district of France can be labeled and referred to as “Champagne”
  - Cost a lot more than sparkling wine
  - Higher quality that is controlled by French government
- b. Sparkling wine name varies by country
  - Sparkling wine in the United States
  - Vin Mousseux in France (outside the Champagne district)

- Spumante in Italy
  - Sekt in Germany
  - Cava in Spain (if made according to national standards)
- c. Sparkling wine creation
- Grapes are harvested and then crushed
  - Yeast is added and fermentation begins
  - Mixture settles and grape stems, seeds, skins, and yeast are filtered out
  - New yeast and sugar is added and the wine is sealed in heavy glass bottles for a second fermentation
  - Bottles are placed on special racks so the yeast can **riddle** in the neck of the bottle
  - Cap is removed and yeasty wine flies from the bottle in a process called **disgorging**
  - **Dosage**, or sugar and aged wine, are added to the bottles to replace the contents that gushed out during disgorging
  - Cork is inserted and wire cage is attached to the top to keep the pressure inside the bottle from causing the cork to fly out, and label is added
  - Sparkling wine can be aged up to 10 years before sale, but gets flatter with age
- d. Grape varieties used to make sparkling wines can be white or black
- Blanc de blancs refers to white wines made from white (green) grapes
  - Blanc de noirs refers to white wines made from black (red) grapes
- e. Dosage determines the wine's sweetness
- Brut nature—Driest style (0 to 0.5% sugar)
  - Brut—Dry with absolutely no sweetness (0.5 to 1.5% sweetness)
  - Extra Dry—Hint of sweetness (1.2 to 2.0% sweetness)
  - Sec—Noticeably sweet (1.7 to 3.5% sweetness)

## Information Sheet

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### Objective 6

- Demi sec—Sweet (3.3 to 5.0% sweetness)
- Doux—Extremely sweet (over 5% sweetness)

#### **Fortified wines**

##### **Key terms:**

- **Aperitif**—Alcoholic beverage consumed before a meal
- **Dry**—Beverage that lacks sweetness
- **Fortified**—Wine that has extra alcohol added
- **Neutral**—High alcohol content spirit; distilled with at least 190 proof
- **Sweet**—Tastes like sugar

- a. Created in the 17th century when European winemakers wanted wine to export that wouldn't spoil
  - Flavor lasts longer after the bottle has been opened
  - Can withstand higher temperatures during storage
- b. Is fortified with additional alcohol content
- c. Most fortified wines have an alcohol content that ranges from 15-21 percent
- d. A **neutral** spirit, usually Brandy, is added
- e. Spirit can be added before, during, or after the fermentation process
  - If spirit is added before fermentation, the result is a **sweet** wine
  - If spirit is added after fermentation, the result is a **dry** wine
- f. Fortified wines will have varying levels of quality, price, and length of aging

Example: Sherry comes in Fino (pale and dry), Amontillado (medium colored and flavored wine), Oloroso (dark, rich wine), and sweet.
- g. Flavored with herbs, fruit peels, or spices
- h. Often used in cooking to flavor sauces, soups, and desserts
- i. Served as an **aperitif** or dessert wine

Objective 7

j. Commonly heard names of fortified wines

- Frontignac
- Frontignan
- Madeira
- Malaga
- Marsala
- Port
- Sherry
- Tokay
- Vermouth

**Wine growing and producing regions**

a. American regions

✓ **Note:** New wineries continue to show up all across the United States.

- Napa Valley, California
- Oklahoma
- Oregon
- Texas
- Washington

*(See Figure 2—American Wine Regions on the next page)*

## Information Sheet

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Figure 2—American Wine Regions



b. French wine regions

- Bordeaux
- Burgundy regions
  - Beaujolaise
  - Chablis
  - Côte Chalonnaise
  - Côte de Beaune
  - Côte Maconnaise
  - Côte de Nuits
- Rhone

*(See Figure 3—French Wine Regions on the next page)*

Figure 3—French Wine Regions



## Information Sheet

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c. Italian regions

- Piedmonte
- Tuscany

Figure 4—Italian Wine Regions



d. Other wine regions

- Spain
- Portugal
- Germany
- Australia
- New Zealand
- Chile
- Argentina
- South Africa

Figure 5—Other Wine Regions



**Objective 8**

**Parts of a wine label**

✓ **Note:** Depending on region of production, wine labels may or may not contain this information. Also, most wines have a front and back label.

**Key terms:**

- **Crop**—Group of plants grown for use in food or manufacturing
- **Estate**—Private home surrounded by considerable amount of farmed land
- **Sulfites**—Fruit preservatives made of salt or sulfurous acid that causes allergic reactions in some individuals
- **Surname**—Name that identifies an individual as being part of a particular family
- **Variety**—Group of plants that are divided by distinguishing characteristics, such as flower or leaf type
- **Volume**—Space inside an object

## Information Sheet

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Figure 6— Sample Front Wine Label

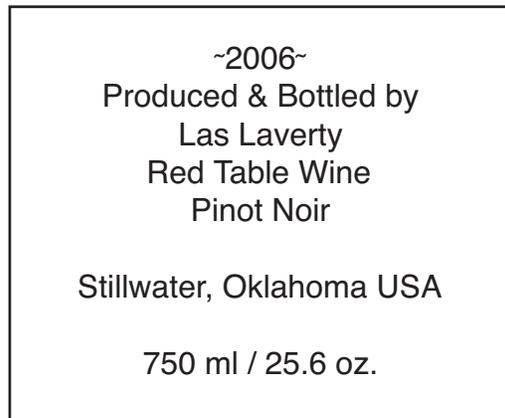
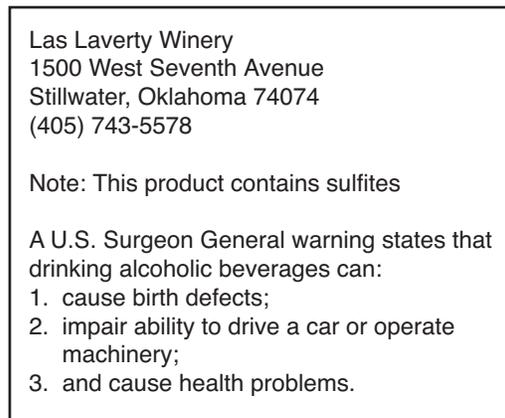


Figure 7— Sample Back Wine Label



- a. Vintage—Indicates the year a particular crop of grapes were harvested
  - Some crops are better than others with each new year
  - A drinker that knows a lot about crop cycles may want to buy or avoid wine bottled in a certain year
- b. Brand name of wine – Lets the drinker know the company that made the wine, often named after something easily recognizable
  - Is preceded by words that indicate who bottled, produced, prepared, vinted, cellared, or aged
  - **Surname** of the family that produces the wine
  - **Estate** where the wine was produced
  - Local landmark of an area, such as a river

c. Wine type

- White wine—Wine that had the stems, seeds, and skins filtered out before fermentation began
- Red wine—Wine fermented with stems, seeds, and skins constantly being folded back into the mix
- Sparkling wine—Wine that went through a second fermentation to obtain carbonation
- Fortified wine—Has had Brandy (or another neutral spirit) added before, during, or after fermentation

d. Class of wine

- Class 1
  - Table wine, light wine, red table wine, light white wine, or sweet table wine
  - Contains between 7-14 percent alcohol content
- Class 2
  - Sparkling wine or Champagne
  - Must be made effervescent by natural means
- Class 3
  - Carbonated wine
  - Effervescence added mechanically
- Class 4
  - Citrus wine
  - Made with ripe citrus fruit
- Class 5
  - Fruit wine
  - Wine made with a fruit other than grapes or citrus
- Class 6
  - Made from Agricultural products
  - Includes vegetable wine

## Information Sheet

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- Class 7
  - Fortified or aperitif wine
  - Has a minimum of 15 percent alcohol content
- Class 8
  - Imitation wine
  - Made from man-made materials
- Class 9
  - Grape table wine flavored with resin
  - May be labeled “retsina”
- e. European classification—Provides information on the quality of the wine, labeling varies by European country
  - Controlled region criteria
    - Grape variety controlled
    - **Crop** size managed
    - Winemaking and maturation methods
    - Is the best value
  - Slightly less controlled region criteria
    - Same as controlled region, but standards aren’t as strict
    - Commonly used by winemakers trying to reach controlled status
    - Is a better value than country or table wines
  - Country wines
    - Flexible controls
    - Quality is lower, but are a great value
  - Table wines
    - Do not indicate grape variety or specific region
    - Governed only by basic health guidelines

## Information Sheet

- Commonly used in restaurants and grocery stores in the country of origin
- Rarely exported
- Are a good value

### f. Grape **variety**

✓ **Note:** This is a sampling of a few of the most popular grape varieties. There are actually hundreds of grape varieties worldwide that are used to make wine. See Table 2 for more varieties and their corresponding colors.

- Red—Cabernet Sauvignon, Dolcetto, Gamay, Merlot, Syrah/Shiraz, Pinot Noir, Zinfandel, Nebbiolo, Sangiovese, Tempranillo
- White—Chardonnay, Pinot Grigio, Riesling, Sauvignon Blanc, Muscat, Gewurztraminer, Palomino, Verdicchio, Pedro Ximenez, Columbard, Trebbiano

### g. Location

- Region of origin—Names the specific area the grapes were grown
- Producer location—Place the wine was fermented and aged
- Bottler location—City the wine was taken from casks and bottled
- Country of origin—Nation in which the wine was grown, produced, and bottled

h. Bottle net contents – Standard wine bottle contains 750 ml (25.6 oz.)

i. Alcohol content – Percentage of alcohol by **volume**

j. Style of wine

Example: Champagne labeled “brut,” or dry

k. Back label

- Name and address of bottler
- Government warning
- Statement indicating the wine contains **sulfites**

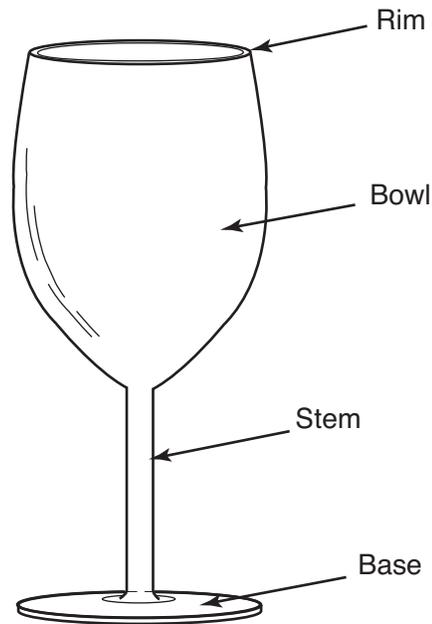
## Information Sheet

### Objective 9

#### Wine glassware

##### a. Parts of a wine glass

Figure 8—Parts of a wine glass



- Rim for mouth to easily drink in beverage
- Bowl to hold beverage
- Stem for the fingers to grasp
- Base to keep the glass from tipping

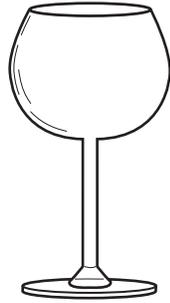
##### b. Glass rim types

- Rolled rim slowly funnels the flow of wine onto the palate
- Cut and polished rim allows an easy flow of wine onto the palate

c. Bowl characteristics

- Red wine bowl

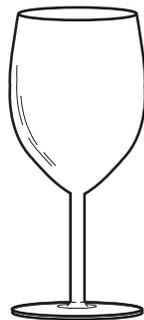
Figure 9—Red Wine Glass



- Holds 9 – 14 oz.
- Rounded shape allows the drinker to swirl the wine without spilling
- Has a wide opening
  - Allows the drinker to put his nose in the bowl and deeply inhale the bouquet
  - Lets in more air for a less concentrated bouquet
- Glass delivers wine to the center or tip of the tongue
- Rim curves in slightly to capture the bouquet
- Large bowl size gives the bouquet room to collect above the wine

- White wine bowl

Figure 10—White Wine Glass



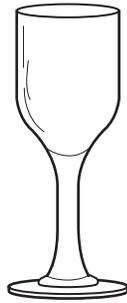
- Holds 6 – 8 oz.

## Information Sheet

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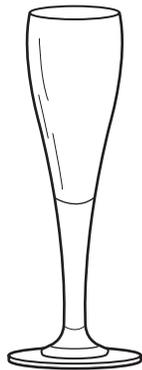
- Smaller tulip shape
  - Collects a more concentrated white wine bouquet
  - Keeps the wine cooler longer
- Smaller opening gives the drinker a more concentrated waft of the lighter bouquet
- Glass delivers wine to the center of the tongue
- Rim curves in slightly to capture the bouquet
- Medium sized bowl compared to other size wine glasses
- Sweet and fortified (sherry) wine bowl

Figure 11—Sweet/Fortified Wine Glass



- Regular size bowl is the 3 oz. sherry “copita” glass
- Small sized bowl because the sweetness of the drink demands small portions
- Accentuated opening delivers wine to the tip of the tongue
- Narrowly tapering glass enhances the fruity aroma, not the alcohol
- Sparkling wine flute is tall and tapered

Figure 12—Sparkling Wine Flute



- Holds 4 – 6 oz.
- Tall glass emphasizes the stream of bubbles
- Tapered shape prevents rapid bubble dissipation
- Narrow shape increases concentration of wine bouquet

- d. Long stems put the glasses in the “stemware” category
- Wine in the bowl does not become heated by the drinker’s hand when the stem is held
  - Holding the stem prevents fingerprints to allow easy view of wine’s color
  - Should be thick enough to support the weight of a bowl filled with the appropriate amount of liquid
- e. Foot of the glass should be wide and sturdy enough to support the weight of an appropriately filled bowl perched atop the stem
- f. Glass characteristics
- Clear glassware allows the drinker to easily examine the color of the wine being served
  - Thin glass is most comfortable in the drinker’s mouth

### Objective 10

#### Wine bar tools

##### Key term:

- **Decanter**—Decorative bottle with a stopper that is used to serve drinks

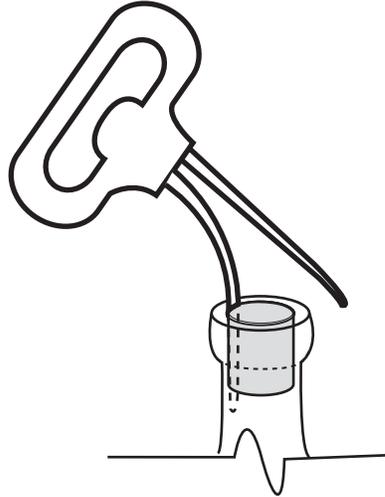
- a. Corkscrew
- Used to extract the cork from the pressurized bottle
  - When pulling a cork out, wrap the hand in a hand towel to avoid touching the bottle’s rim

## Information Sheet

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- Three main kinds of corkscrews
  - Dishonest butler

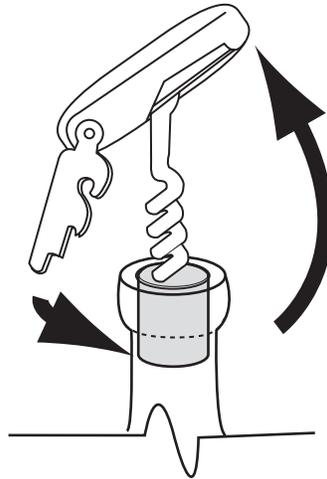
Figure 13—Dishonest Butler corkscrew



- A long, thin blade is inserted between the cork and the bottle's rim
- A shorter blade is inserted between the cork and the bottle's rim on the other side
- The server slowly wiggles the key-shaped top in an upward motion, pulling the cork out as far as possible
- Remove the cork by hand with a twisting, circular motion
- This method does not damage the cork

— Waiter's pull

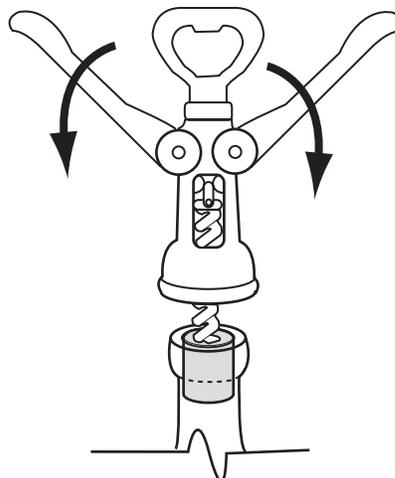
Figure 14—Waiter's Pull corkscrew



- Similar to a pocket knife
- The cork screw unfolds and is inserted into the cork
- The pull unfolds and hooks onto the bottle's rim
- As the server pulls up on the end of the utensil, the cork slowly pulls from the bottle
- After there is sufficient room to grasp the cork, pull it out with a circular, twisting motion

— Winglever

Figure 15—Winglever corkscrew

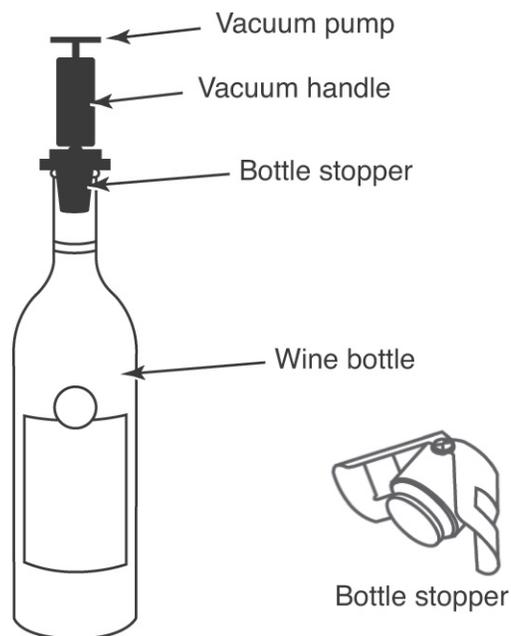


## Information Sheet

- Has two “wings” attached to the lever on the corkscrew
- Turn the corkscrew until the pull hooks onto the rim of the bottle
- Slowly push down the two “wings”
- The cork will rise up
- Remove the corkscrew and pull the cork out with a circular, twisting motion

### b. Wine vacuum

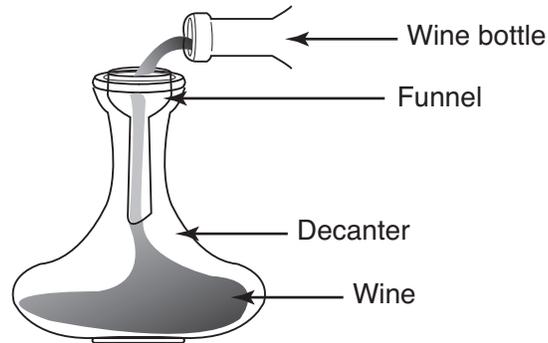
Figure 16—Wine Vacuum and Stopper



- Used to remove and seal out the oxygen from opened wine bottles
- Supposed to keep flavor fresher longer
- Consists of two parts
  - Rubber top is inserted in the bottle
  - External vacuum or pump that sucks the air from the bottle through the rubber top

c. **Decanter**

Figure 17—Decanter



- Decorative glass or crystal server
- Uses
  - Aerates the wine with oxygen, allowing the drinker to experience the bouquet
  - Gives the server more room to remove sediments
    - Cork sediment can cause bitterness
    - Crystallization is not aesthetically pleasing to some people
    - Older wines sometimes have sediments that have settled over the years
  - Can improve the flavor of older and younger wines
  - Aesthetically pleasing appearance of decanted wine on a table

d. **Champagne bucket**

Figure 18—Champagne Bucket



## Information Sheet

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- Used to chill sparkling wines
- Bottle is placed in the center of the bucket, which is then packed with ice
- Used tableside, sometimes on a small stand

e. Foil cutter

Figure 19—Foil Cutter



- Small utensil with a sharp hook that cuts the foil wrapped around the bottle's rim and neck
- By cutting the foil, the serving prevents the metal from touching the wine—which can cause oxidation
- Some foil cutters are attached to the end of corkscrews

f. Dump bucket

- Commonly, an empty champagne bucket is used as a dump bucket
- Used at wine tastings to dump wine from glass before filling with another wine
- Allows a place for the drinker to dump rinse water
- Helps prevent intoxication, as the consumer doesn't have to drink the entire serving

g. Water pitcher

Figure 20—Water Pitcher



- Pitchers of water are available at wine tastings to cleanse the glass by swirling and dumping in a dump bucket
- By rinsing the glass, the drinker avoids mixing various wines and can enjoy the solo flavor and bouquet of each new wine
- Wine drinkers are also provided with glasses of water to cleanse their palates before trying another wine or moisten their tongue from a drier wine

h. Vintage charts or wine wheel

- Tool that helps the drinker determine the quality of a particular vintage or wine
- Commonly used by serious wine drinkers
- Helps restaurateurs select “in demand” wines

Objective 11

**Storing wine**

a. Storing wine

- Flavor and appearance can be damaged by sunlight, vibrations, and/or extremely hot or cold temperatures
- Store wine in a cool, dry place
  - Dry, downstairs cellar
  - Temperature-controlled wine refrigerator
  - Cool closet
  - Refrigerator on the bottom rack, away from the light and motor

## Information Sheet

### Objective 12

- Do not store wine next to an item with a strong odor  
Example: Onions
- Bottle should be stored on a rack, resting on its side
  - Keeps the cork moist
  - Maintains an air-tight seal

### Wine serving temperatures

#### Key term:

- **Bouquet**—Scent of a particular wine
  - a. Warmer serving temperatures will allow the drinker to enjoy the **bouquet** associated with older or red wines
  - b. Cooler serving temperatures can mask the imperfections found in cheaper wines
  - c. Wine will cool about 4°F for every 10 minutes in the refrigerator
  - d. Wine will warm about 4°F for every 10 minutes out of the refrigerator
  - e. To chill a bottle of wine in a hurry, put in the freezer for about 35 minutes
  - f. Traditionally, red wine is served warm, white wine is served cool, and sparkling wines are served chilled

Table 1—Wine Serving Temperatures

Wine Type	Serving Temperature (in °F)
Sparkling	42-54
Rosé	48-54
White	48-58
Light Sherry	48-58
Red	57-68
Fortified	57-68
Dark Sherry	57-68

Objective 13

Cork removal

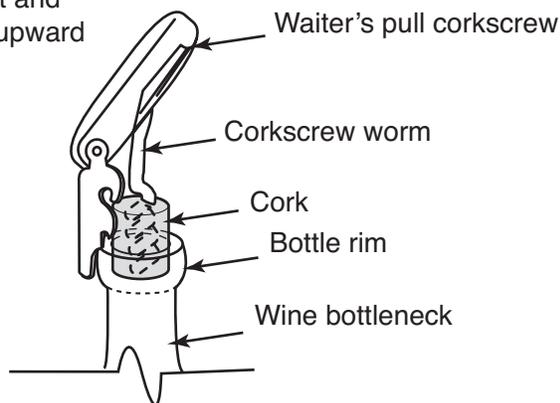
Key terms:

- **Cross contaminating**—To transfer germs or other pathogens from one object to another, such as using an unclean hand or knife to prepare food
- **Rim**—Raised circular hole at the top of a bottle where liquids pour out

- a. Wipe off all mold from the top of the cork before pouring
- b. Hold the bottle correctly
  - If wine, hold it by the bottleneck
  - If sparkling wine, hold it by the bottom with a towel wrapped around it to prevent slipping on condensation covered bottle
- c. If sparkling wine, remove the cage and cork simultaneously
  - Point the bottle opening away from your face and any bystanders, as the cork could fly off powerfully and injure someone
  - Open the cage by pulling the wire circles up and twisting the wires loose
  - Protecting your hand with a cloth napkin, squeeze the cage and cork so you can slowly twist the cork from the bottle
- d. Cut the foil around the bottle's **rim**
  - Use a foil cutter
  - Cut the foil around the rim about 1/8" to 1" down from the bottle's rim
  - Remove the cut foil with a napkin instead of fingers to avoid **cross-contaminating** the bottle's rim
- e. Insert a corkscrew into the center of the cork

Figure 21 —Cork Removal

Twist and pull upward



## Information Sheet

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- f. Turn the corkscrew until there's only one groove left on the spear
  - If the corkscrew appears to be going into the cork off center, simply unscrew it and reinsert
  - If the cork breaks, simply remove the broken part and screw the corkscrew into the cork that is remaining in the bottle
- g. Hook the lever of the corkscrew onto the bottle's rim
- h. While holding the bottleneck, slowly pull the cork upward as far as possible
- i. Remove the loosened cork by using a hand towel
- j. If the corkscrew didn't pull the cork out fully, hold the hand towel over the cork with one hand tightly and turn the bottle with the other hand until it is removed

### Objective 14

#### Wine service

##### Key term:

- **Palate**—Areas of the tongue that taste substances

- a. A person that serves wine is called a sommelier
- b. Make sure the glasses or decanter don't have soap residue on them by rinsing with water and drying with a clean, soft towel before serving
- c. Keep hand and fingers away from the top of the bottle, where the wine will pour out
- d. Handle both clean and dirty glassware by the stem to prevent fingerprints, cross-contamination, and beverage warming
- e. If more than one glass on the table, use the proper glass for the type of wine
- f. Allow the person that ordered the bottle of wine the first glass so they can taste and approve or disapprove the wine for the other guests
- g. After getting approval from the person that ordered the bottle of wine, it is customary to serve in the following order: women, older guests, then men
- h. Provide each guest with a glass of water so they can cleanse the **palate** as needed
- i. Wine is served from the right of the guest

### Objective 15

- j. Place the glass just above the knife in the place setting
- k. Serve wine with the proper course
- l. If serving more than one wine during a meal or wine tasting, make sure the newest wine is served in a rinsed or brand new glass to prevent flavor mixing

#### Wine pouring

- a. If there is sediment in the wine bottle, the wine should be decanted
  - Performed out of customer's sight
  - Place the bottle upright (on its bottom) to allow sediment to settle on the bottom
  - Pour liquid through cheesecloth into decanter to filter sediment
  - While pouring, keep bottle at an angle so sediment remains on the bottom and doesn't flow into the decanter
- b. Wine is poured either at the guest's table or in the bar area and delivered on a tray
  - Pour wine toward the center of the glass
  - Keep the top of the bottle away from the inside of the wine glass when pouring
  - Preserve bubbles in sparkling wines by pouring along the side of the glass
  - Fill the glass no more than 1/3 of the way full to allow the drinker to swirl and smell the wine
  - When finished pouring, twist the bottle slightly as you lift up to prevent drips
- c. The bottle must be recorked after pouring to prevent oxidization
  - Handle the cork with a napkin covering your fingers and hand
  - Put the cork back into the bottle in the same direction it came out, or the exposed end of the cork could contaminate the flavor of the wine
  - Some establishments will use a wine vacuum to pump the air from the wine bottle and seal it to keep the contents fresh longer

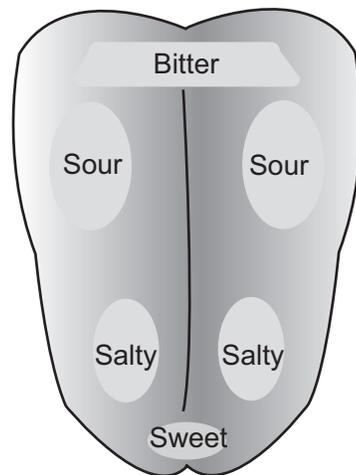
## Information Sheet

### Objective 16

#### Wine tasting and the senses

- a. Watch the server pour the wine
- b. Look at the wine's color
  - Wine should be poured in a clear glass on a white tablecloth background so the drinker can examine the coloring closely
  - White wines deepen in color from yellow to gold with age
  - Red wines change from red to brick with age
- c. Swirl the contents
  - Pick up the glass by the stem and swirl the contents of the glassware's bowl in a smooth, clockwise motion
  - Swirling the wine allows more oxygen into the wine, which releases a stronger bouquet
- d. Smell the bouquet
  - Age can distort the flavor of white wine, yet often improves the flavor of red wine
- e. Taste the varying flavors with your tongue

Figure 22—Areas of the Tongue That Detect Taste



- Sweet—Indicates sugar left over after fermentation
  - Sour—Tartness indicates acidity in the wine
  - Bitter—Notes tannins, which have a woody flavor
  - Salty—Not usually identified in wine
- f. Reflect upon the taste left in your mouth after swallowing

Objective 17

- Body—Sensation of thickness or weight on the tongue
- Acidity—Light, just right, or strong
- Woodiness—From aging in wooden barrels or tannins
- Flavors—Identify specific fruits or spices
- Finish—Length the flavors lasted in your mouth
- Enjoyment—Desire to drink more

**Common wine flavor sensations**

✓ **Note:** A particular wine can range in flavor depending on ingredients and/or method of production. For instance, a Pinot Gris/Pinot Grigio has dry, sweet, and spicy styles and would therefore fall into contrasting categories.

- a. Lighter bodied wines feel light and airy on the tongue
  - Feel light and airy on the tongue
  - Lower alcohol content and fewer tannins
- b. Heavier (full) bodied wines
  - Feel heavy and thick on the tongue
  - Higher alcohol content and/or more tannins
- c. Sweeter wines have more sugar left in the wine after fermentation
- d. Drier wines have all or most of the sugar fermented out of the wine
- e. Acidic wines have a vinegary, sour flavor
- f. Bitter taste comes from the taste buds tasting the alkaline in the wine
- g. Fruity wine refers to the flavor and aroma of the grapes used in winemaking, or any extra fruit added to flavor the wine
 

Examples: Pineapple, pear, peach, apricot, green apple, cherry, raspberry, prunes, raisins
- h. Floral wine is made with a grape variety that tastes and smells similar to a flower
 

Examples: Roses, honeysuckle, jasmin, violets
- i. Herbaceous wine has been made with a grape variety that tastes and smells similar to a herb
 

Examples: Grass, sage, mint, eucalyptus, and/or thyme.
- j. Oak flavor occurs when wine has been aged in oak barrels

## Information Sheet

- k. Spicy wine has been made with a grape variety that tastes and smells similar to a spice

Examples: Pepper, clove, cinnamon, and/or mint.

- l. Wines with specific flavor sensations (see Table 2)

Table 2—Wines with Specific Flavor Sensations

Flavor Sensation	Red	White
<b>Lighter bodied</b>	Pinot Noir, Beaujolais, White Shiraz, Cabernet Merlot, Gamay	White Merlot, White Zinfandel, Sauvignon Blanc, Riesling, Pinot Gris
<b>Heavier (Full) bodied</b>	Merlot, Zinfandel, Cabernet Sauvignon, Shiraz	Semillon, Viognier, Chardonnay
<b>Sweeter</b>	Cabernet Sauvignon, Lambrusco, Grenache, and dessert wines (Sherry, Port, Madeira, Marsala, Tokay), fortified wines	White Merlot, White Zinfandel, Chardonnay, Chenin Blanc, some Rieslings, Spumante, sparkling wines
<b>Drier</b>	Chianti, Merlot, Cabernet Sauvignon, Shiraz	Chardonnay, Sauvignon Blanc, Riesling, Viognier, Gewurztraminer, Pinot Blanc
<b>Acidic</b>	Nebbiolo, Barbera	Chenin Blanc, Sauvignon Blanc, sparkling wines, Riesling, Pinot Blanc, Semillon, Trebbiano
<b>Bitter</b>	Cabernet Sauvignon, Merlot, Zinfandel, Syrah	Sauvignon Blanc, Garganega, Verdelho
<b>Fruity</b>	Syrah, White Shiraz, Tempranillo, Barbera	Chardonnay, Columbard, Muscat, Viognier, Sauvignon Blanc, Gewurztraminer,
<b>Floral</b>	Beaujolais, Cabernet Franc	Muscat, Gewurztraminer, Riesling
<b>Herbaceous</b>	Cabernet Sauvignon, Cabernet Franc	Sauvignon Blanc
<b>Oak flavor</b>	Barolo, Cabernet Sauvignon	Chardonnay, Sauvignon Blanc, Pinot Gris, Seyval Blanc
<b>Spicy</b>	Syrah/Shiraz, Cabernet Sauvignon, Zinfandel	Some Chardonnays, some Pinot Gris or Pinot Grigios, Gewurztraminer

Objective 18

**Wine faults and curiosities**

- a. Musty aroma
  - Sealed with a fungus infected cork
  - Called “corked wine”
  - ✓ **Note:** Just because wine has fungus collecting on the outside top of the cork, it does not mean the wine has cork taint. Fungus on the outside could be due to the bottle being aged in a humid, moist area.
- b. Sour flavor
  - Damaged by bacterial infection
  - Tastes of vinegar
- c. Discoloration
  - Caused by exposure to too much oxygen (oxidization)
  - Wine loses its aroma
  - Red wine’s color appears brown
- d. Crystals
  - Crystals consist of tartaric acid that has precipitated in the wine
  - Small white crystals show up on the cork or in the wine
  - Can be decanted out of the wine
  - Don’t affect flavor
- e. Pieces of cork in the wine
  - Cork breaks or crumbles when it is removed from the bottle
  - Pieces of cork can be removed by decanting
  - Doesn’t affect flavor

## Information Sheet

### Objective 19

#### Pairing wine with food

- a. As a general rule, wine is drunk with food or alone for pleasure, and should be served according to the taste preference of the consumer
  - Never insist a consumer purchase a wine they don't want or enjoy
  - Some of the more inexpensive wines can be very flavorful, and are commonly found in chain type restaurants for food pairings
  - In general, finer restaurants will serve more expensive wines to match the quality of the food with the wine
- b. It is common to serve red wine with red meat (beef) and white wine with white meat (pork, chicken, fish)
- c. Thanks to more ethnic and complex dishes today, wine consumers are encouraged to be creative with food and wine pairings through experimentation (see Table 3 below)

Table 3: Common Food and Wine Pairings

	Pasta or Vegetarian	Chicken, Turkey, Pork	Fish, Seafood	Beef, Lamb, Veal
<b>Red</b>	Pinot Noir, Merlot, Sangiovese, Zinfandel	Pinot Noir, Merlot	Pinot Noir	Merlot, Zinfandel, Cabernet Sauvignon
<b>White</b>	White Zinfandel, Sauvignon Blanc, Chardonnay	White Zinfandel, Sauvignon Blanc, Chardonnay	White Zinfandel, Sauvignon Blanc, Pinot Grigio, Chardonnay	Zinfandel

- d. The quality of food and wine should be matched
- e. It is common to match regional foods with the regional wines  
Example: Italian food with an Italian wine
- f. Match flavor intensities, such as a light-bodied wine with a lighter food and a hearty wine with heavier food
- g. Acidic white wines can cut the oiliness of some food flavors  
Example: Dry white wine with rich, oily fish

- h. Pair the wine with the sauce, seasoning, or dominant flavor of the dish
- i. To prevent “sugar overload” on the palate when serving a sweet-tasting main course or side dish, balance sweetness by selecting a wine that is drier than the food
- j. Opposing flavors can intensify the meal flavors  
Example: Pair a dessert wine with a hot, spicy dish
- k. Fortified wines are commonly served as an aperitif
- l. Adjust food flavor (spices, ingredients) to better pair with wine’s sweetness or bitterness when needed
- m. Pairing wine and chocolate
  - Wine should be just as sweet or sweeter than the chocolate with which it’s served
  - Stronger, darker chocolates should be paired with more full-bodied wines
  - Champagne and chocolate are considered a classic pair
- n. Pairing wine and cheese
  - Rather than red wines, white wines usually pair better with cheeses
  - Softer cheeses should be served with more acidic wine to cut the cheese coating the mouth
  - Hard cheeses pair well with red wines
  - When serving a mild cheese, the wine should be just as sweet or sweeter than the cheese with which it’s paired
  - Strong cheeses require strong wines to match the overpowering taste
  - Sweet wines pair well with salty, strong, or pungent cheesesExamples: Chardonnay, dessert wines

## Information Sheet

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### Objective 20

#### Cooking with wine

- a. When cooking with wine, most—if not all—of the alcohol content is cooked out
  - Alcohol in wine evaporates at 178° F and water boils at 212° F, so alcohol evaporates before water even begins boiling
  - The food retains the wine’s flavor, not the alcohol
  - Sparkling wine’s effervescence is lost when cooking with wine; soup or sauces will not be “bubbly”
- b. It is easy to use too much wine when cooking
  - Add small batches of wine to food, cook accordingly, then perform a taste test before adding more
  - Strongly flavored fruity, sour, or sweet wines can overpower the flavor of food
- c. All wines contain sulfites, to which some people may be allergic
  - Sulfites prevent oxidation, or the turning of wine into vinegar
    - Sulfites are a byproduct of yeast fermentation
    - More sulfites are sometimes added to wines by winemakers
  - A person allergic to sulfites may experience respiratory problems after consumption
  - People allergic to sulfites should not eat food cooked with wine
- d. Never use aluminum or cast iron pans or tools to cook when using wine, or the wine can become oxidized and impart a vinegary flavor and odor
- e. Wines bought in grocery stores, or “cooking wines,” are highly salty due to sulfites
  - Allows them to bypass the state’s alcohol taxes and laws
  - Is not fit for drinking, only for cooking because of very salty flavor
  - The recipe’s salt content must be adjusted if using a cooking wine
- f. When selecting a wine to cook, instead of choosing the most expensive wine select one that tastes good

- g. Select a wine to cook with based on flavors that will complement the food's flavor
- h. Common uses for wine in the kitchen
  - Deglazing—Pouring wine directly onto a hot pan on the burner to leave a syrupy glaze that serves as an initial base for a sauce, soup, or meat
    - White wine needs to be reduced a small amount
    - Red wine needs to be reduced until it's a deep red color, or the food can turn out purple
  - Reducing—To thicken and intensify the flavor of soups and sauces by adding wine and boiling uncovered to evaporate excess liquid
  - Reduction sauce—Removing cooked meat (oven roasted or stove top cooked) from a pan, and pouring the remaining liquid on deglazed wine to create a thick sauce or gravy to pair with the meat
  - Braising—Meat is seared and added to a hot pan containing deglazed wine and any liquid remaining from cooking the meat; the mixture is simmered
  - Flambéing—Hot wine is added to food and lit with a long match or lighter in front of the customer
    - The alcohol content in wine is what allows the food to catch fire
    - Creates a tableside visual presentation
    - Deposits rich flavor from the spirit into the food
  - Marinating—Wine and spices are combined in a bag or bowl and the meat is added, whereupon the mixture sits for an extended period to allow the meat to soak in the marinade
    - The tannins in a red wine serve as an acidic marinade that soften tough meat fibers, making the meat more tender
    - Acidity helps cut fat and oil in the meat
    - Moisture from the wine prevents the meat from drying out while cooking
  - Finishing—Wine is added to a finished dish, as its flavor can cut the sweetness and aroma can be increased

## Information Sheet

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- i. Wine is extremely flammable due to alcohol content, so safety precautions must be followed
  - Store all alcoholic liquids away from heat or flame
  - Add wine to the food away from the stove's flame
  - Hold the pan by the handle with an oven mitt, away from your face (or anyone else's)
  - Tilt the pan slightly downward and slowly add the wine to avoid hot steam and spatters
  - Deglazing, or pouring wine directly onto a hot pan on the burner, can create spattering that will combust directly onto the cook's face or clothing
  - When flambéing, add the wine away from the flame, then carefully tilt the pan towards the flame on the burner
  - When marinating meat with wine, use the wine for only one batch then throw away – or foodborne illness can quickly ensue
- j. When cooking with wine (not drinking), the terms Champagne or sparkling wine are equivalent, so select according to taste and budget

**Unit Contents**

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**Student Worksheets**

\* Assignment Sheets

1—Investigate Local, State, and Federal Alcohol Laws. . . . .	SW 3-1
2—Troubleshoot Legal Scenarios . . . . .	SW 3-5

\* Job Sheets

1—Perform an ID Check . . . . .	SW 3-9
2—Stop Beverage Service to an Intoxicated Customer . . . . .	SW 3-13
3—Document an Accident Involving an Intoxicated Individual. . . . .	SW 3-15
4—Document an Accident Involving an Employee . . . . .	SW 3-19

\* Student Worksheets are located in the back of the Student Edition.



### Objective Sheet

#### Unit Objective

After completing this unit, the student should demonstrate knowledge of the basic laws and responsibilities of beverage service. The student should demonstrate these competencies by completing the assignment sheets and by scoring a minimum of 85 percent on the written test.

#### Specific Objectives

After completing this unit, the student should be able to:

1. Match terms related to beverage laws and responsibilities with their definitions.
2. Select true statements regarding the path of alcohol through the body.
3. Complete statements regarding Blood Alcohol Concentration (BAC).
4. Complete statements regarding alcohol absorption factors.
5. Match the effects of alcohol with their parts of the brain
6. Rank the levels of intoxication.
7. Select true statements regarding problems associated with intoxicated guests.
8. Complete statements regarding controlling excessive consumption.
9. Complete statements regarding identification cards.
10. Select true statements regarding the Dram Shop Act
11. Select true statements regarding the legal sale of alcohol to guests.
12. Complete statements regarding the legal drinking age.
13. Select true statements regarding alcohol service guidelines.
14. Identify laws that vary by state.
15. Investigate local, state, and federal alcohol laws. (Assignment Sheet 1)
16. Troubleshoot legal scenarios. (Assignment Sheet 2)
17. Perform an ID check. (Job Sheet 1)
18. Stop beverage service to an intoxicated customer. (Job Sheet 2)

## Objective Sheet

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19. Document an accident involving an intoxicated individual. (Job Sheet 3)
20. Document an accident involving an employee. (Job Sheet 4)

Information Sheet

Objective 1

Terms and definitions

✓ **Note:** Please refer to “Key terms” for definitions.

- Blood Alcohol Concentration (BAC)
- Esophagus
- Expired
- Impairment
- Inhibitions
- Lawsuit
- Liability
- Small intestine

Objective 2

Path of alcohol through the body

**Key terms:**

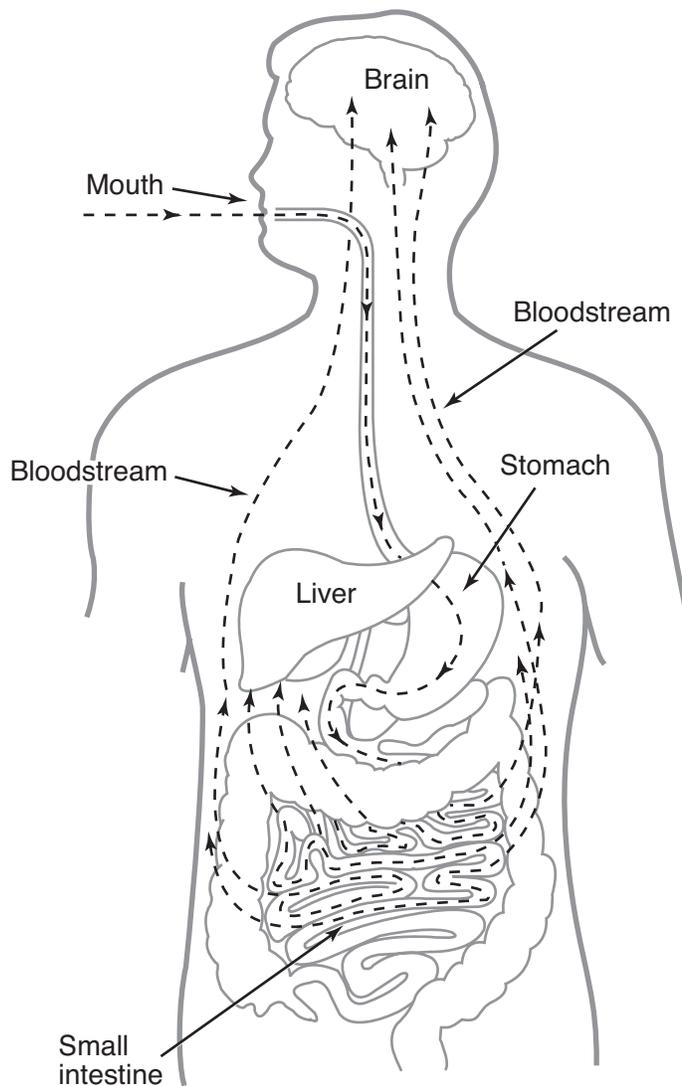
- **Blood Alcohol Concentration (BAC)**—Concentration of alcohol contained in a person’s blood; measured by grams of alcohol in one milliliter of blood, discussed as a percentage  
Example: A BAC of .10 indicates there is 1/10 of a gram of alcohol in 100 milliliters of a person’s blood, or the person’s blood contains 10 percent alcohol.
- **Esophagus**—Body organ that serves as a tube to carry food from the mouth to the digestive system
- **Small intestine**—Part of the intestine between the stomach and large intestine that digests food and absorbs nutrients

- a. As alcohol travels through the body, it affects many organs and body systems

*(See Figure 1: Path of Alcohol Through the Body on the next page)*

## Information Sheet

Figure 1: Path of Alcohol Through the Body



- b. Alcohol is consumed through the mouth and travels down the **esophagus** to the stomach
- c. It begins digestion in the stomach and **small intestine**, where some of it is absorbed into the bloodstream
- d. Various organs absorb different amounts of alcohol (see *Table 1: Initial Alcohol Absorption by Organ*)

Table 1: Initial Alcohol Absorption by Organ

Organ	Absorption
Mouth	2-4%
Stomach	20-25%
Small intestine	75-80%

- e. Unabsorbed alcohol continues to travel through the gastrointestinal tract
- f. Alcohol eventually absorbs through the walls of the small intestine and into the bloodstream
- g. Once in the bloodstream, the heart pumps the alcohol throughout the body
- h. After being pumped throughout the body, alcohol is ready to be eliminated
  - The organs process alcohol so it can be eliminated
    - The kidneys filter alcohol from the bloodstream, and the waste leaves the body through urinary tract
    - The lungs exhale alcohol from the body with each breath
    - The liver breaks about 90 percent of alcohol in the blood down into acetic acid, which leaves the body via the urinary tract
    - Alcohol's effects continue until all is eliminated from the body
    - Alcohol left in body (2-10 percent) is eventually eliminated through the breath, blood, urine, sweat, feces, saliva, and/or breast milk
  - Nothing speeds the process of elimination
  - **Blood Alcohol Concentration (BAC)** lowers at a rate of about .015 per hour

**Objective 3**

**Blood Alcohol Concentration (BAC)**

**Key term:**

- **Impairment**—Mental state caused by the influence of drugs, alcohol, or mental illness where a person's faculties are lessened to the point where he or she cannot function in a normal capacity

## Information Sheet

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- a. Blood Alcohol Concentration is often referred to simply as “BAC”
- b. Measurement of alcohol in the body
  - Can be measured by police and medical professionals as evidence of excessive alcohol consumption in the event of an accident
  - Alcohol is commonly measured in the blood, breath, and urine
    - Blood test measures alcohol in the blood, and requires a needle to draw blood
    - Breath test requires the person to blow air from their mouth into a special breath testing machine to measure the amount of alcohol contained in the lungs via the breath
    - Urine test measures alcohol in the urine, and requires the offender to urinate in a cup for a sample
- c. Indicates the fraction of alcohol present in the blood
- d. Increases with alcohol consumption
  - The more alcohol a person drinks, the more alcohol will be present in the bloodstream resulting in a higher BAC
  - As a person digests alcohol, the BAC lowers
- e. Usually described as a fraction amount, but can also be listed as a percentage

Example: A person with a BAC of 0.15 would have 15 percent alcohol present in their blood
- f. Concentration of alcohol figured by a formula that takes certain factors into consideration
  - Females typically have 49% water weight and males typically have 58% water weight
  - A standard drink is one 12 oz. beer (5% weight/volume), 1.5 oz. of 80 proof liquor (4% weight/volume), or 5 oz. wine (10% weight/volume)
- g. Calculators and charts make it easy to figure BAC for various genders and body weights as compared to number of drinks consumed (see *Tables 2 and 3 – Alcohol Impairment Charts for Females/Males*)

**Table 2—Alcohol Impairment Chart for Females**

Approximate Blood Alcohol Concentration (BAC) Percentage									
Drinks	Body Weight (in Pounds)								
	90	100	120	140	160	180	200	220	240
0	.00	.00	.00	.00	.00	.00	.00	.00	.00
1	.05	.05	.04	.03	.03	.03	.02	.02	.02
2	.10	.09	.08	.07	.06	.05	.05	.04	.04
3	.15	.14	.11	.10	.09	.08	.07	.06	.06
4	.20	.18	.15	.13	.11	.10	.09	.08	.08
5	.25	.23	.19	.16	.14	.13	.11	.10	.09
6	.30	.27	.23	.19	.17	.15	.14	.12	.11
7	.35	.32	.27	.23	.20	.18	.16	.14	.13
8	.40	.36	.30	.26	.23	.20	.18	.17	.15
9	.45	.41	.34	.29	.26	.23	.20	.19	.17
10	.51	.45	.38	.32	.28	.25	.23	.21	.19

**Table 3—Alcohol Impairment Chart for Males**

Approximate Blood Alcohol Concentration (BAC) Percentage								
Drinks	Body Weight (in Pounds)							
	100	120	140	160	180	200	220	240
0	.00	.00	.00	.00	.00	.00	.00	.00
1	.04	.03	.03	.02	.02	.02	.02	.02
2	.08	.06	.05	.05	.04	.04	.03	.03
3	.11	.09	.08	.07	.06	.06	.05	.05
4	.15	.12	.11	.09	.08	.08	.07	.06
5	.19	.16	.13	.12	.11	.09	.09	.08
6	.23	.19	.16	.14	.13	.11	.10	.09
7	.26	.22	.19	.16	.15	.13	.12	.11
8	.30	.25	.21	.19	.17	.15	.14	.13
9	.34	.28	.24	.21	.19	.17	.15	.14
10	.38	.31	.27	.23	.21	.19	.17	.16

## Information Sheet

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### Objective 4

#### Alcohol absorption factors

- a. Weight—The more a person weighs, the less he or she will be affected by alcohol due to increased water content in body
- b. Body composition—A person with a muscular body composition will be less affected by alcohol, as muscle contains more water than fatty tissue
  - Alcohol is water soluble and absorbed into the muscles
  - More muscle to fat ratio means lower BAC
  - Higher fat to muscle means higher BAC for same quantity of alcohol
- c. Gender—Women typically have more body fat than men, and thus will have a higher BAC than men who drink the same amount
- d. Food eaten—Amount of food eaten can determine how quickly alcohol moves through the digestive tract
  - Drinking without food in the stomach speeds the absorption of alcohol, making the person intoxicated at a faster rate
  - Fatty foods are harder to digest, and therefore slow the absorption rate
  - Carbohydrates digest quickly, allowing more absorption by alcohol in the stomach
- e. Medications taken—Drug interactions can affect alcohol absorption
  - Some medications increase the intoxicating effects of alcohol
  - Certain medications have toxic and/or fatal effects when combined with alcohol
  - It is important to check with your doctor or pharmacist before mixing medications and alcohol
- f. Overall health—Only people in good health should consume alcohol
  - Sick people are often dehydrated, which robs the body of water content
  - Sick people often have small appetites, meaning they have little to no food in their stomach

- g. Type of alcohol consumed is not as important as quantity of alcohol consumed, as some drinks are more potent than others (see *Table 4 below*)

**Table 4—Alcohol Content of Some Typical Drinks**

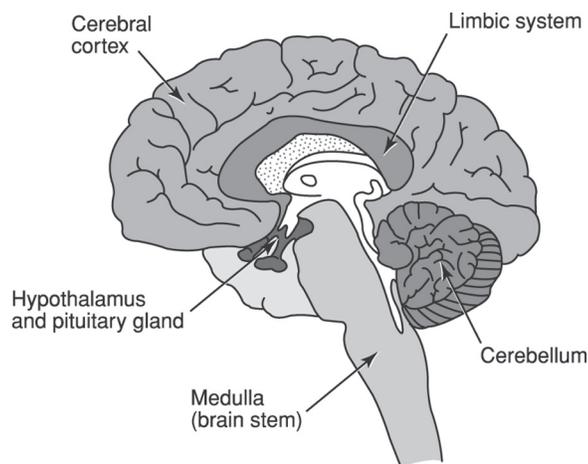
Drink	Alcohol Content
Manhattan	1.15 oz. (34 ml)
Dry Martini	1.00 oz. (30 ml)
Malt liquor—12 oz. (355 ml)	0.71 oz. (21 ml)
Airline miniature	0.70 oz. (21 ml)
Whiskey Sour/Highball	0.60 oz. (18 ml)
Table Wine—5 oz. (148 ml)	0.55 oz. (16 ml)
Beer—12 oz. (355 ml)	0.54 oz. (16 ml)
Reduced Alcohol Beer	0.28 oz. (8 ml)

**Objective 5**

**Effect of alcohol on the brain**

- Alcohol is a central nervous depressant, meaning it slows the body's vital functions
- After alcohol is consumed, its effects are delayed; it usually takes 30 – 90 minutes for alcohol to be absorbed into the bloodstream
- Five major parts of the brain effected by alcohol

Figure 2: Parts of the brain



## Information Sheet

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- d. Cerebellum (coordinates muscle movement)
  - Loss of balance  
Examples: Tripping over things, falling when walking, falling off chairs/barstools
  - Uncoordinated movement  
Examples: Spilling drinks, can't sit up straight, stumbling/staggering walk, bumping into things, jerky dancing or movements
- e. Cerebral cortex (Processes information from the senses, initiates voluntary muscle movements, and influences other areas of the brain)
  - Slows behavioral inhibitions, causing talkativeness, increased self confidence, fewer social inhibitions
  - Slows down processing of the senses; increased pain threshold, reduced vision, sense of smell and touch, hearing, and taste  
Example: Loud speech, numb taste buds
- f. Hypothalamus/pituitary gland (Functions on the medulla; coordinates sex, thyroid, and growth hormones with the pituitary gland)
  - Increases sexual behavior
  - Decreases sexual performance
  - Increases kidney production of urine
- g. Limbic system (Controls emotion and memory)
  - Overexaggerated emotion  
Examples: Anger, depression
  - Inflated sense of self-esteem  
Example: Overly friendly with strangers
  - Loss of memory
- h. Medulla (Controls involuntary body functions)  
Examples: Breathing, body temperature, blinking
  - Sleepiness
  - Unconsciousness
  - Slowed or stopped breathing
  - Decreased blood pressure and body temperature

Objective 6

Levels of intoxication

**Key term:**

- **Inhibitions**—Feelings that prevent a person from acting spontaneously or speaking their mind freely

- a. Small amounts of alcohol relax the drinker and slow down body processes
  - Helps the drinker relax
  - Lowers **inhibitions**
  - Reduces ability to concentrate
  - Relieves tension/pain in the body
  - Slows the reflexes
- b. Medium amounts of alcohol impair the drinker’s ability to physically function
  - Alters emotions
  - Increases drowsiness
  - Slurs speech
- c. Large amounts of alcohol can be fatal
  - Breathing problems
  - Coma
  - Unconsciousness
  - Vomiting

Objective 7

Problems associated with intoxicated guests

**Key terms:**

- **Lawsuit**—Disagreement between two parties (or people) that is taken to a court for a judge to decide which party is liable for any damages incurred
- **Liability**—Party or person responsible for damages or costs incurred

- a. Intoxicated guests present a **liability**, as they are more likely to cause an accident

## Information Sheet

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- b. The serving establishment and servers can be held responsible for damages incurred by intoxicated guests
- c. Damages can result in a **lawsuit** because the server did not stop serving alcohol, thus allowing the guest to become drunker
- d. There are many ways that intoxicated guests can harm themselves or others
  - Assault
  - Domestic violence
  - Drowning
  - Homicides
  - Pregnancy
  - Rape
  - Suicides
  - Traffic collisions

### Objective 8

#### **Controlling excessive alcohol consumption**

- a. Have a thorough knowledge of company policy involving alcoholic beverages and/or the number of drinks to serve
- b. Count the number of drinks served to customers either mentally or by checking their ticket/tab
- c. Work with other servers to be aware of accurate drink counts
- d. Engage in some friendly conversation with customers to see if they've had too much to drink
- e. If a customer is drinking alcoholic beverages too quickly, slow down your service so they can't get another drink quite so quickly
- f. Do not serve guest another drink until they are finished with the one they have on the table/bar
- g. Serve water with alcohol, especially with shots, as water dilutes the alcohol
- h. Remove empty glassware before serving new drinks
- i. Have coffee available for customers to drink in order to sober up

Objective 9

- j. When in doubt as to whether or not to serve another drink, don't serve the customer any more alcohol

Identification cards

**Key term:**

- **Expired**—Card that is no longer valid because the current date is older than the expiration date listed on the card

- a. Because of the hefty fines associated with serving alcohol to underage drinkers, it is important to verify a person is old enough to purchase alcohol

Example: Under Oklahoma's Prevention of Youth Access to Alcohol Law, alcohol sellers face a \$500 fine and a year in jail for a first offense, a \$2,500 fine and a year in jail for a second offense, and a \$5,000 fine and five years in jail on a third, felony offense.

- b. A picture identification card with a birth date must be checked
- c. Underage drinkers will often try to present a fake identification card to obtain access to alcohol
- d. A fake card usually resembles a state driver's license (see Figure 1 below)

Figure 3—State-Issued Identification Card (Driver's License)



- e. In addition to a driver's license, establishments may accept passports, military ID's, and state issued identification cards as acceptable forms of identification

## Information Sheet

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- f. To spot a fake, the person checking should be familiar with the standard card
  - Size
  - Colors
  - Lamination
  - Plastic thickness
  - Letter and number size and typeface
  - Card layout, placement of photo
- g. The photograph on a fake ID card may be easy to spot
  - The photographed person may not look like the actual person presenting the card
  - Photo may be blurred or dark
  - Person should not be wearing a hat or sunglasses in the photo
  - The edge of the picture may be dark or missing a border
- h. Sometimes, the front of the card may look legitimate, but the back of the card may be blurred or appear different
- i. Look for signs of tampering on the card
  - Peeled back or melted plastic on/around the card
  - Eraser marks
  - Different fonts or typing
  - Damage to the paper
  - Card alignment off center
  - Numbers or letters scratched off or replaced in a strange font or ink
- j. Altered cards feature false information so the person appears older than he or she really is
  - Incorrect birthday
  - Height and weight listed may not be anywhere near the cardholders

- Photographed person may not appear anything like the person presenting the card
  - Photograph of another person could mean the ID has been stolen or they are using a friend's ID card
- k. Procedure for checking an identification card
- If there is any doubt as to whether or not the guest is age 21 or over, ask to see an ID
    - If there is still doubt, ask to see a second ID
    - If a fake, the cardholder usually will not have a second form of identification that matches the original
  - Ask the guest for his or her card
  - Hold the card in your hand
    - Ask the guest to remove the card from behind the plastic in the wallet
    - If they merely hold the card up, take it from them and physically hold it
  - Check photo, height, weight, and eye color listed on the card to see if it matches the cardholder
  - Do not accept an **expired** identification card
  - Ask detailed questions directly from the card
  - Ask questions for which the card holder may not be prepared to answer
    - County of residence
    - Astrological birth sign  
Examples: Gemini, Aquarius, Leo
    - Year of high school graduation
    - Ask for the birthday in the specific month, day and year format, as fake cardholders will memorize the birth date in a number format  
Example: May 30, 1975 will be listed as "05/30/1975" on a card

## Information Sheet

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### Objective 10

- Match signatures
- Ask for a second or third form of identification

#### **Dram Shop Act**

- a. The term “Dram Shop” comes from 18th century businesses in England that sold gin by the spoonful, called a dram
- b. A Dram Shop (also called “dramshop”) is a retailer that offers alcohol  
Example: Bar, tavern, pub
- c. This act holds retail establishments accountable for any harm caused by an intoxicated guest
- d. Harm caused by intoxicated guests includes injury, death, or other damages
- e. Dram Shop Act laws vary across the United States
  - Eight states impose no Dram Shop liability
  - The other 43 states have varying degrees of severityExamples: In California, Dram Shop liability is imposed only on cases involving drunken minors; in Texas, the person must be so visibly drunk he’s a clear danger to himself and others
- f. The retailer/employee of the retailer must be proven to have known the individual was intoxicated and a danger to others before they are liable for damages
- g. Dram Shop Act forces many alcohol retailers to train their employees as to when to stop serving guests alcohol

### Objective 11

#### **Legal sale of alcohol**

- a. Article XXI of the United States Constitution gives each state the right to regulate alcohol distribution and sale
- b. States vary in their policy regarding alcohol sales
  - Some states require lower point alcohol be sold outside of liquor storesExample: Oklahoma requires grocery stores and convenience stores sell 3.2 beer, while their neighbor Texas sells 6.0 beer.

## Information Sheet

- Some counties in Texas are considered “dry,” meaning they cannot sell alcohol
  - ✓ **Note:** Some dry counties in Texas require the drinker to fill out a card that allows them to purchase alcohol at a restaurant.
- c. Each state gives local communities the right to regulate youth access to alcohol through local ordinances and law enforcement agencies
- d. State laws address various violations regarding the sale of alcohol to minors
  - Sale of alcohol to minors
  - Minimum age for entry into a liquor store, nightclub, or other entity that sells alcohol
  - Possession of alcohol by a person under the age of 21
  - Misrepresentation of age via false identification or other means
- d. Most foodservice establishments keep employees aware of current events regarding the sale of alcohol to minors
  - Law and penalty education
    - Example: Use staff meetings to remind servers the fines and jail time that can be associated with serving alcohol to underage consumers
  - Law enforcement silent check-ups
    - Example: Police officers making a “surprise” visit to an establishment and checking guest’s ID cards for underage offenders.
  - Training programs before and during employment
  - Educational material
    - Example: Brochures and information posters that are easily accessible
- e. When presented with a fake identification card, it is up to the server to politely refuse alcoholic beverage service
- f. In some establishments, the server is instructed to keep the fake identification card so it can be destroyed

## Information Sheet

- g. Alcohol is sold either “on premises” of an establishment, or “off premises”

Example: Off premises sites include a gas station or grocery store

- h. Both on and off premises, sale of alcohol varies by state with regard to hours and days of the week

Examples:

**Table 5: On and Off-Premise Alcohol Sales Hours**

State	On-Premises Alcohol Sales Hours	Off-Premises Alcohol Sales Hours
California	6 a.m. to 2 a.m.	
Colorado	7 a.m. to 2 a.m.	8 a.m. to midnight (Monday through Saturday)
Kentucky	6 a.m. to midnight	
Minnesota	8 a.m. to 2 a.m. (7 days a week)	8 a.m. to 10 p.m. (Monday through Saturday)
Nevada	24 hours	

### Objective 12

#### Legal drinking age

- Legal drinking age lower limit varies across the world from ages 0-21, but most countries allow 18 year-olds to drink alcohol
- The United States National Minimum Drinking Age Act of 1984 required all states to raise their minimum purchase and public possession of alcohol age to 21
- The law prohibits purchase and public possession of alcohol by minors, but some states do not prohibit them from drinking alcohol
- With parental consent or presence, some states do permit minors to consume alcohol for/under special circumstances
  - If accompanied by parent or legal guardian
  - Some States also allow exceptions for educational purposes

Example: Culinary school

### Objective 13

#### Alcohol service guidelines

- For established religious purposes, when accompanied by a parent, spouse or legal guardian age 21 or older

Example: Holy sacrament

- Medical purposes when prescribed or administered by a licensed physician, pharmacist, dentist, nurse, hospital or medical institution
- In private clubs or establishments
- While being employed by a licensed manufacturer, wholesaler, or retailer

- a. Some states allow 18 year-olds to be bartenders/servers, while others require a minimum age of 21 to handle alcohol for a bar/restaurant
- b. Servers should not imbibe in alcohol while on the clock
  - Increases their liability in the event of an emergency/accident
  - Decreases their judgment ability and decision-making process
  - Is unsanitary; against health regulations
- c. Do not serve underage drinkers
  - Anyone caught with or suspected of possessing a fake identification card
  - Individual that appears underage and does not have an ID for proof of age
- d. Refuse service to anyone who appears intoxicated
  - Prevents potentially embarrassing situations for the guest and the server
  - Hopefully keeps the guest from drinking and driving
    - The 50 states and the District of Columbia all have drinking and driving laws
    - Across the board, all of the states define it as a crime to drive with a BAC at or over 0.08
  - Reduced liability for the server (*see Dram Shop Act*)

